Motherboard installation guide

Motherboard

DQ120
Revised Edition V8
December 2012

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Safety information

Electrical safety

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adpater or extension cord. These devices could interrupt the grounding circuit.
- Ensure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

Operation safety

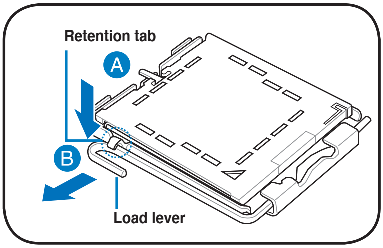
- Before installing the motherboard and adding devices on it, carefully read all the manuals that came with the package.
- Before using the product, ensure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets, and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.

Chapter 1: Quick Start

1.1 Installing the CPU

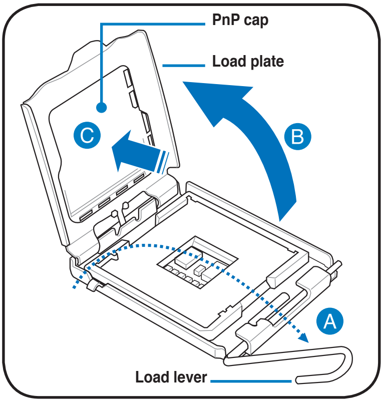
1.1.1 Intel® LGA775 socket

1. Locate the CPU socket on the motherboard.
2. Press the load lever with your thumb (A), then move it to the left (B) until it is released from the retention tab.

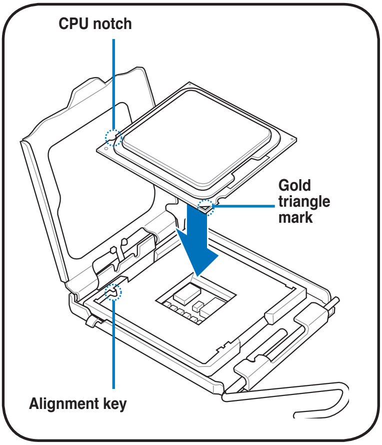


To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU.

3. Lift the load lever in the direction of the arrow to a 135° angle (A).
4. Lift the load plate with your thumb and forefinger to a 100° angle (B), then push the PnP cap from the load plate window to remove (C).

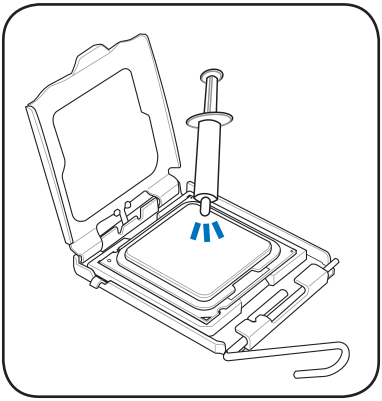


5. Position the CPU over the socket, making sure that the gold triangle is on the bottom-left corner of the socket then fit the socket alignment key into the CPU notch.



The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

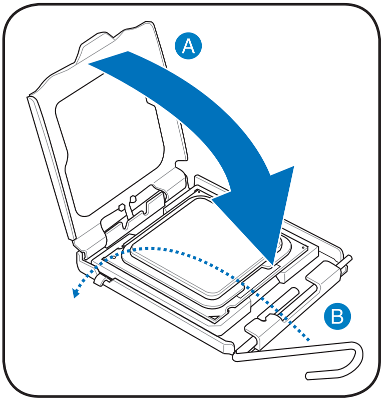
6. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



Some heatsinks come with pre-applied thermal paste. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

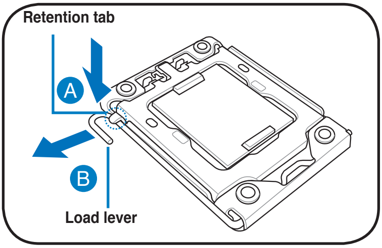
7. Close the load plate (A), then push the load lever (B) until it snaps into the retention tab.



1.1.2 Intel® LGA1366 socket

1. Locate the CPU socket on the motherboard.

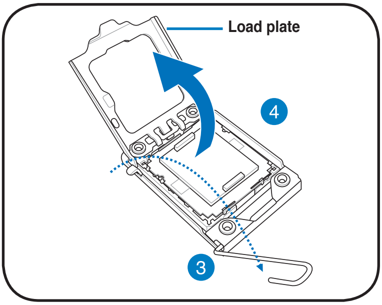
2. Press the load lever with your thumb (A), then move it to the left (B) until it is released from the retention tab.



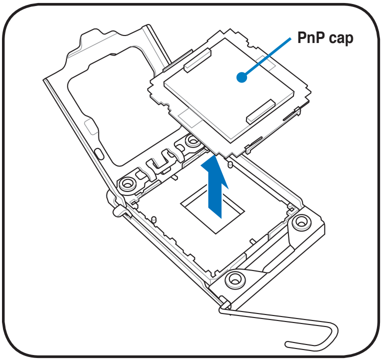
To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU.

3. Lift the load lever in the direction of the arrow to a 135º angle.

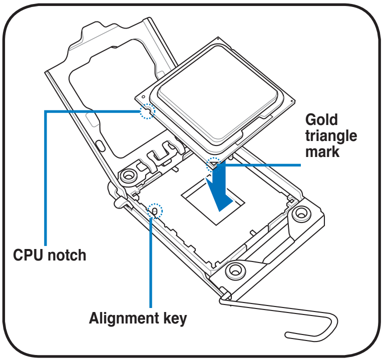
4. Lift the load plate with your thumb and forefinger to a 100º angle.



5. Remove the PnP cap from the CPU socket.

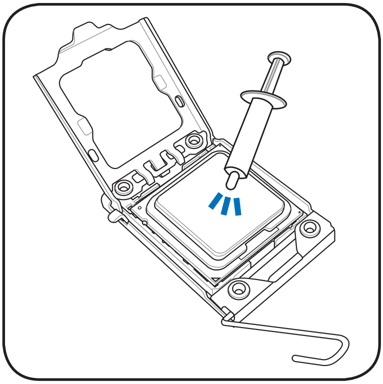


6. Position the CPU over the socket, ensuring that the gold triangle is on the bottom-left corner of the socket, and then fit the socket alignment key into the CPU notch.



The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

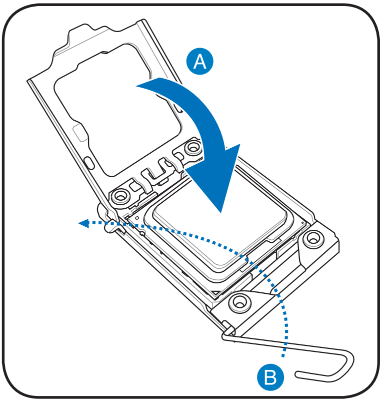
7. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



Some heatsinks come with pre-applied thermal paste. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

8. Close the load plate (A), and then push the load lever (B) until it snaps into the retention tab.

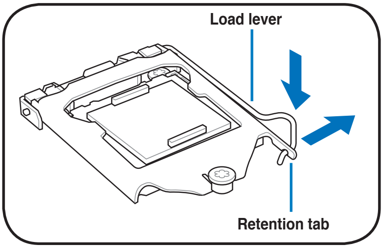


1.1.3 Intel® LGA1156 socket

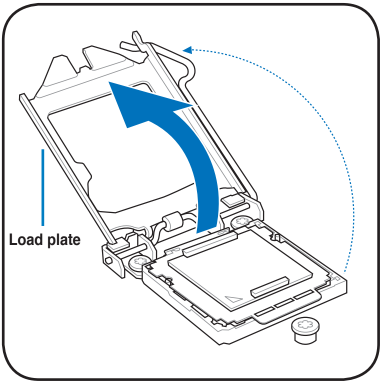
The LGA1155 CPU is incompatible with the LGA1156 socket. DO NOT install a LGA1155 CPU on the LGA1156 socket.

1. Locate the CPU socket on the motherboard.
2. Press the load lever with your thumb (A), and then move it to the right (B) until it is released from the retention tab.

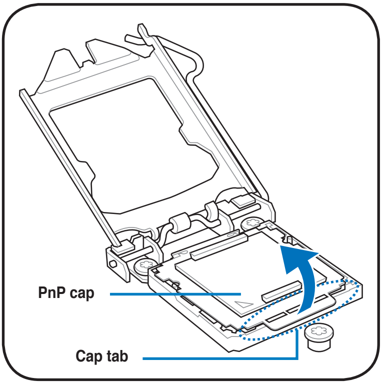
To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU.



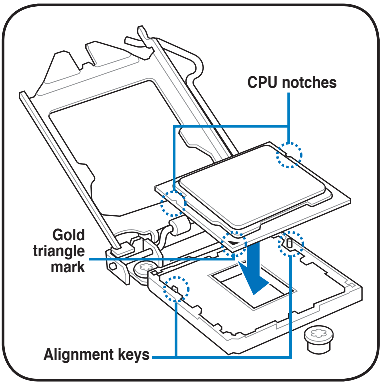
3. Lift the load lever in the direction of the arrow until the load plate is completely lifted.



4. Remove the PnP cap from the CPU socket by lifting the tab only.

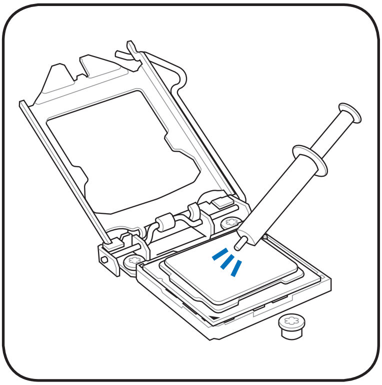


5. Position the CPU over the socket, ensuring that the gold triangle is on the bottom-left corner of the socket, and then fit the socket alignment keys into the CPU notches.



The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

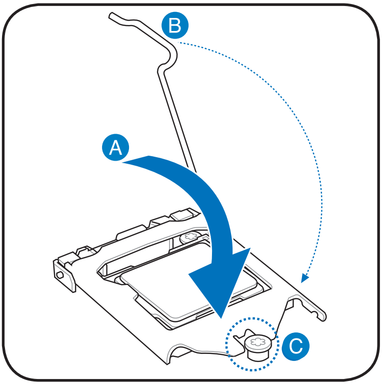
6. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



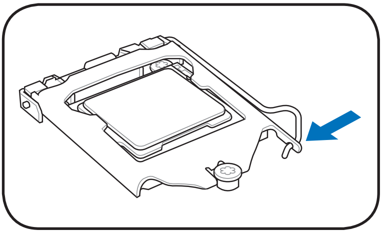
Some heatsinks come with pre-applied thermal paste. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

7. Close the load plate (A), and then push down the load lever (B), ensuring that the front edge of the load plate slides under the retention lock (C).



8. Insert the load lever under the retention tab.

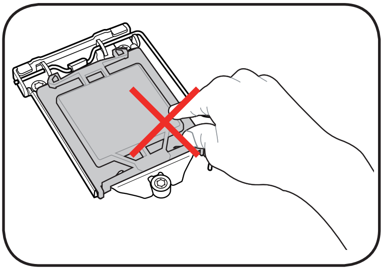


1.1.4 Intel® LGA1155 socket (PnP cap on the load plate)

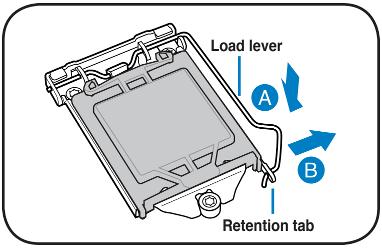
The LGA1156 CPU is incompatible with the LGA1155 socket. DO NOT install a LGA1156 CPU on the LGA1155 socket.

1. Locate the CPU socket on the motherboard.

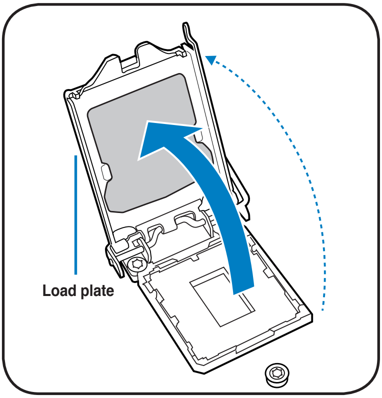
2. Be sure not to remove the PnP cap from the CPU socket before you install the CPU.



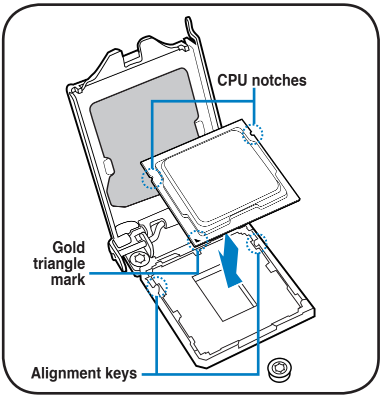
3. Press the load lever with your thumb (A), and then move it to the right (B) until it is released from the retention tab.



4. Lift the load lever in the direction of the arrow until the load plate is completely lifted.

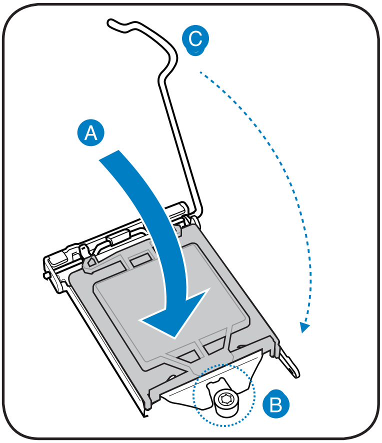


5. Position the CPU over the socket, ensuring that the gold triangle is on the bottom-left corner of the socket, and then fit the socket alignment keys into the CPU notches.

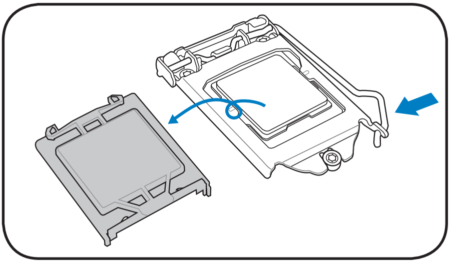


The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

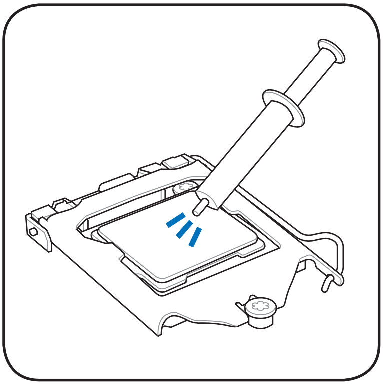
6. Close the load plate (A), ensuring that the front edge of the load plate slides under the retention lock (B). Then push down the load lever (C).



7. Insert the load lever under the retention tab to remove the PnP cap from the CPU socket.



8. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



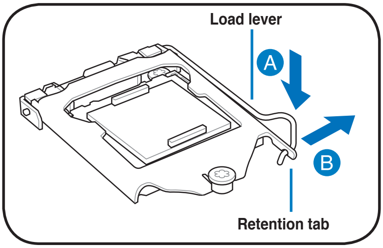
Some heatsinks come with pre-applied thermal paste. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

1.1.5 Intel® LGA1155 socket (PnP cap under the load plate)

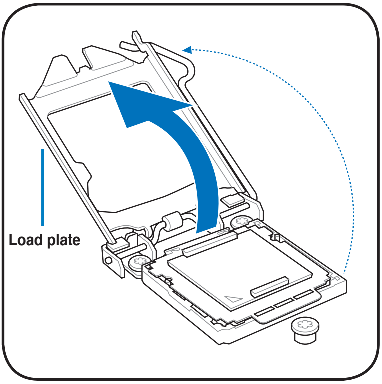
The LGA1156 CPU is incompatible with the LGA1155 socket. DO NOT install a LGA1156 CPU on the LGA1155 socket.

1. Locate the CPU socket on the motherboard.
2. Press the load lever with your thumb (A), and then move it to the right (B) until it is released from the retention tab.

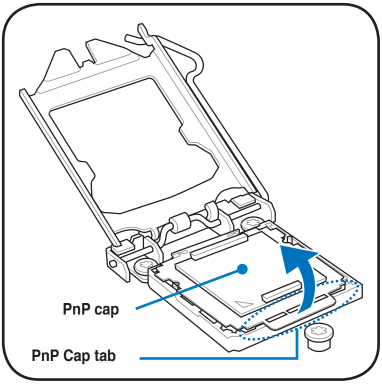


To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU.

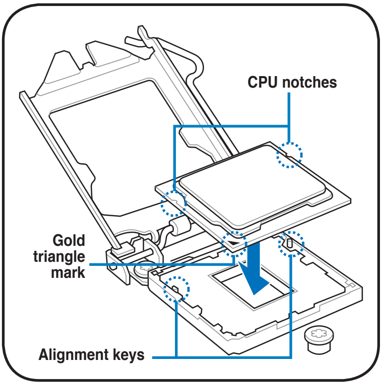
3. Lift the load lever in the direction of the arrow until the load plate is completely lifted.



4. Remove the PnP cap from the CPU socket by lifting the tab only.

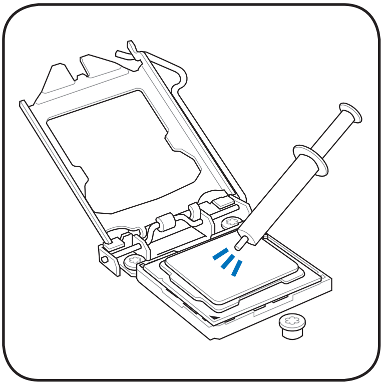


5. Position the CPU over the socket, ensuring that the gold triangle is on the bottom-left corner of the socket, and then fit the socket alignment keys into the CPU notches.



The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

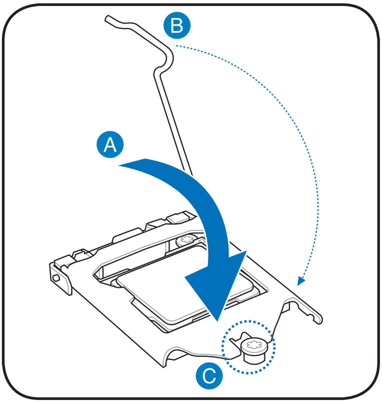
6. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



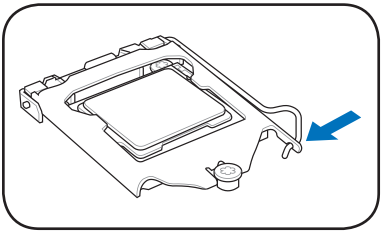
Some heatsinks come with pre-applied thermal paste. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

7. Close the load plate (A), and then push down the load lever (B), ensuring that the front edge of the load plate slides under the retention lock (C).



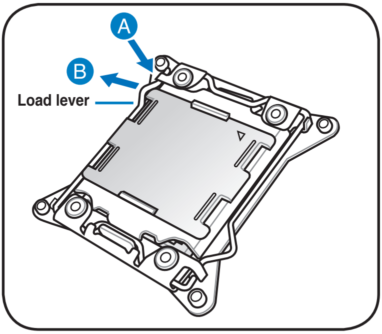
8. Insert the load lever under the retention tab.



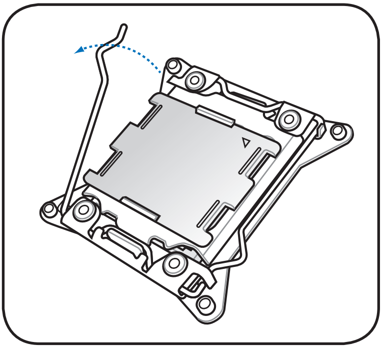
1.1.6 Intel® LGA2011 socket

1. Locate the CPU socket on the motherboard.
2. Press the left load lever with your thumb (A), then move it to the left (B) until it is released from the retention tab.

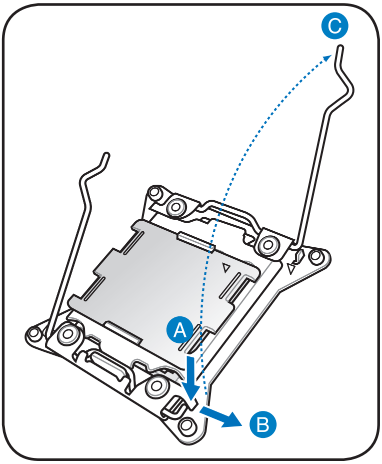
To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU.



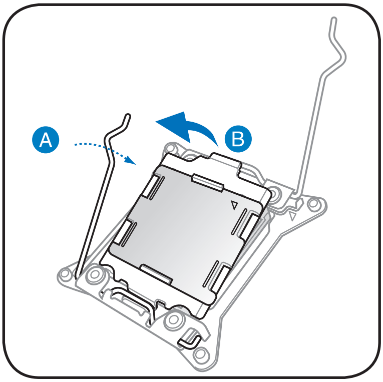
3. Slightly lift the load lever in the direction of the arrow.



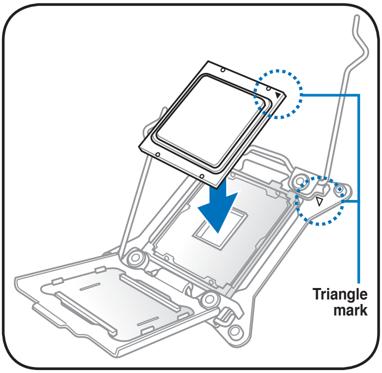
4. Press the right load lever with your thumb (A), then move it to the right (B) until it is released from the retention tab. Lift the load lever in the direction of the arrow (C).



5. Push the left load lever (A) to lift the load plate (B).

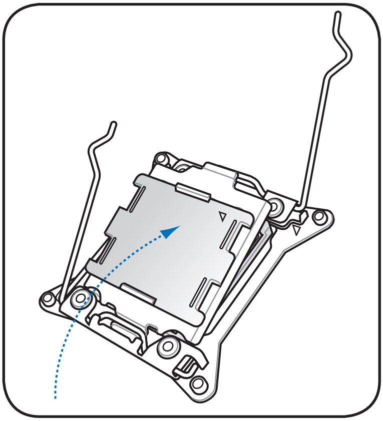


6. Position the CPU over the socket, ensuring that the triangle mark is on the top-right corner of the socket.

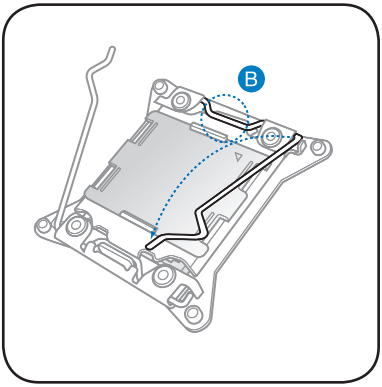


The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

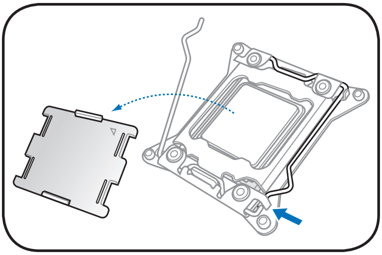
7. Close the load plate.



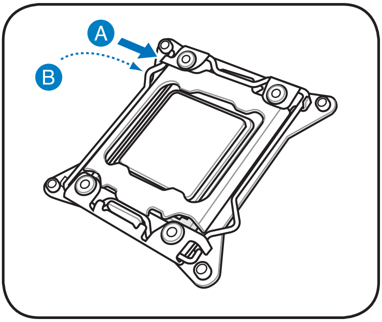
8. Push down the right load lever (A), ensuring that the edge of the load plate is fixed by the lever (B).



9. Insert the right load lever under the retention tab. Remove the PnP cap from the CPU socket.



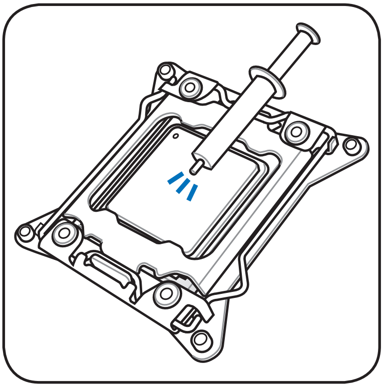
10. Push down the left load lever (A), and then insert the lever under the retention tab (B).



11. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.

Some heatsinks come with pre-applied thermal paste. If so, skip this step.

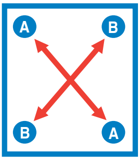
The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

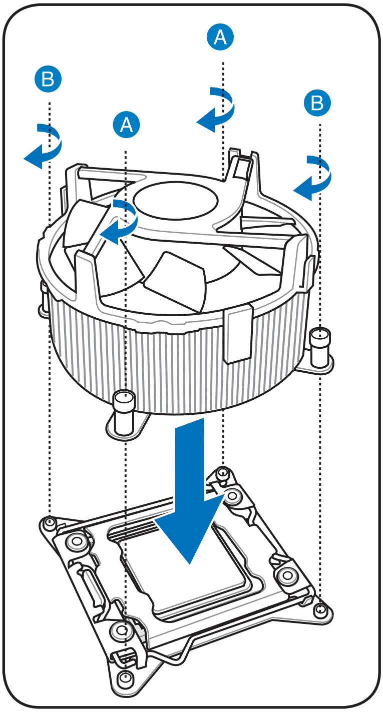


12. Place the heatsink on top of the installed CPU, ensuring that the four fasteners match the holes on the CPU socket.

13. Twist each of the four screws with a Philips (cross) screwdriver just enough to attach the heatsink to the CPU socket. When the four screws are attached, tighten them one by one to completely secure the heatsink.

Tighten the four heatsink screws in a diagonal sequence.



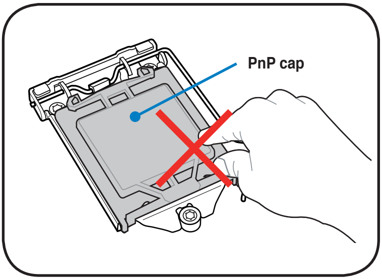


1.1.7 Intel® LGA1150 socket (PnP cap on the load plate)

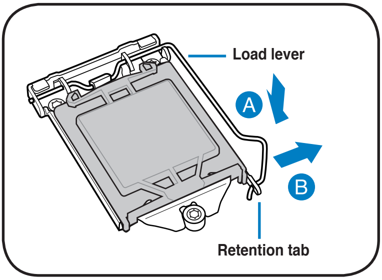
Ensure that you install the correct CPU designed for LGA1150 socket only. DO NOT install a CPU designed for LGA1155 and LGA1156 sockets on the LGA1150 socket.

1. Locate the CPU socket on the motherboard.

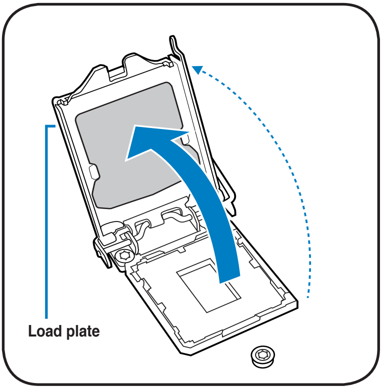
   DO NOT remove the PnP cap yet from the CPU socket. Doing so may bend the pins of the socket. Refer to the illustration below for the location of the PnP cap.



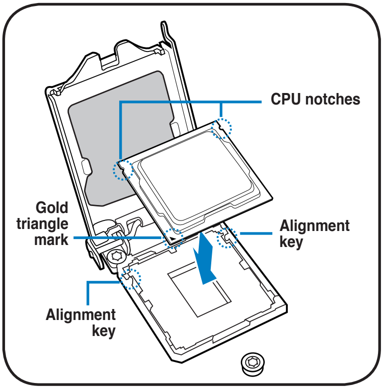
2. Press the load lever with your thumb (A), then move it to the right (B) until it is released from the retention tab.



3. Lift the load lever until the load plate is completely lifted.

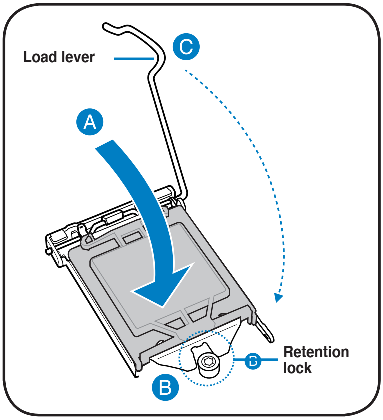


4. Position the CPU above the socket, ensuring that the gold triangle mark is on the bottom-left corner of the socket, then fit the CPU notches to the socket's alignment keys.

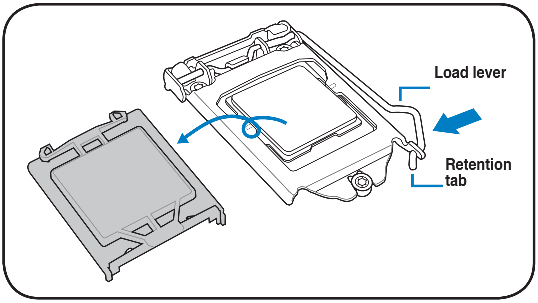

CPU notches
Gold triangle mark
Alignment key
Alignment key

The CPU fits in only one orientation. DO NOT force the CPU into the socket to prevent bending the pins on the socket and damaging the CPU.

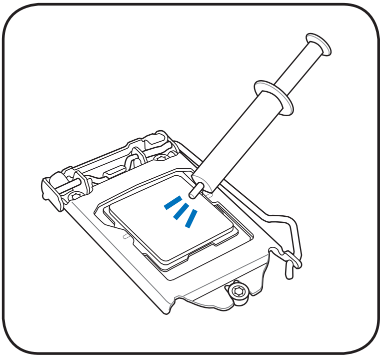
5. Close the load plate (A), ensuring that the front edge of the load plate slides under the retention lock (B) then push down the load lever (C).


Load lever
C
A
Retention lock
B
B

6. Insert the load lever under the retention tab to remove the PnP cap from the CPU socket.


Load lever
Retention tab

7. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is evenly spread in a thin layer.



Some heatsinks come with pre-applied Thermal Interface Material. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately and seek professional medical help.

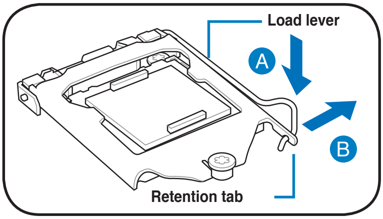
1.1.8 Intel® LGA1150 socket (PnP cap under the load plate)

Ensure that you install the correct CPU designed for LGA1150 socket only. DO NOT install a CPU designed for LGA1155 and LGA1156 sockets on the LGA1150 socket.

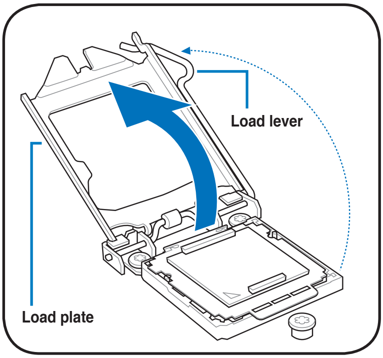
1. Locate the CPU socket on the motherboard.

2. Press the load lever with your thumb (A) then move it to the right (B) until it is released from the retention tab.

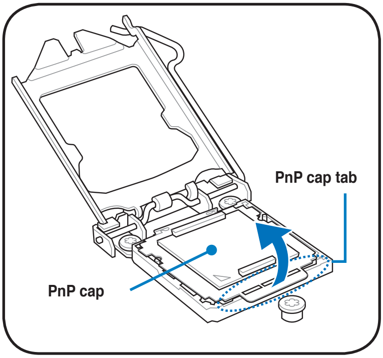
DO NOT remove the PnP cap yet from the CPU socket. Doing so may bend the pins of the socket.



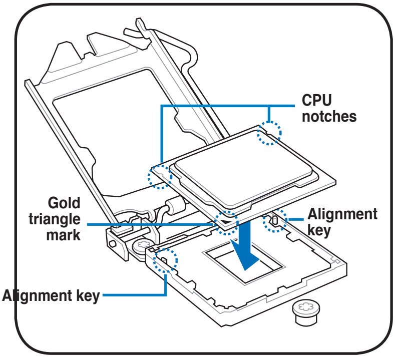
3. Lift the load lever until the load plate is completely lifted.



4. Lift the PnP cap tab to remove the PnP cap from the CPU socket.

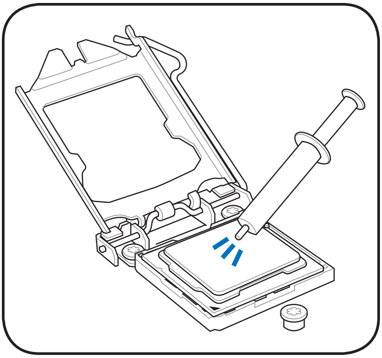


5. Position the CPU above the socket, ensuring that the gold triangle mark is on the bottom-left corner of the socket, then fit the CPU notches to the socket's alignment keys.


CPU notches
Gold triangle mark
Alignment key
Alignment key

The CPU fits in only one orientation. DO NOT force the CPU into the socket to prevent bending the pins on the socket or damaging the CPU.

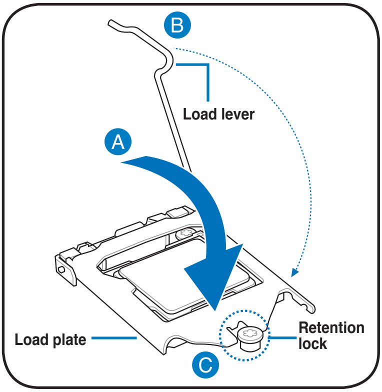
6. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is evenly spread in a thin layer.



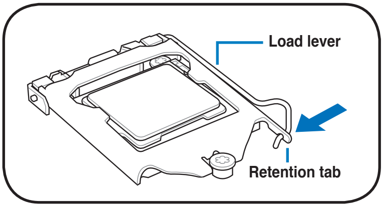
Some heatsinks come with pre-applied Thermal Interface Material. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately and seek professional medical help.

7. Close the load plate (A) then push down the load lever (B), ensuring that the front edge of the load plate slides under the retention lock (C).


B
Load lever
A
Load plate
Retention lock
C

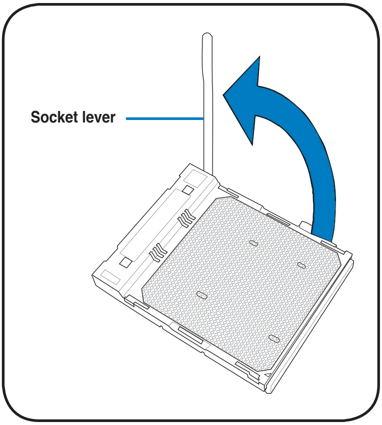
8. Insert the load lever under the retention tab.


Load lever
Retention tab

1.1.9 AMD AM2 / AM2+ / AM3 socket

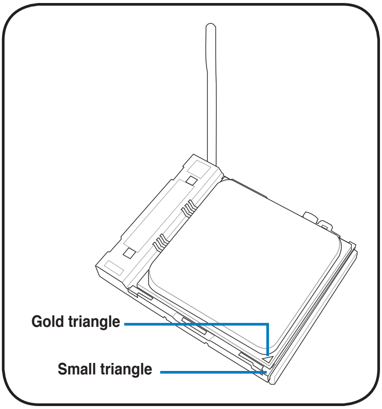
- The AMD AM2 and AM2+ sockets are compatible with AMD AM2, AM2+ and AM3 processors.
- The AMD AM3 socket is compatible with AMD AM3 processors. DO NOT install an AMD AM2+ / AM2 processor on the AM3 socket. Only certain AM3 motherboard models support AM3+ processors by upgrading BIOS. Refer to ASUS support site for details.

1. Locate the CPU socket on the motherboard.
2. Unlock the socket by pressing the lever sideways, then lift it up to a 90º angle.

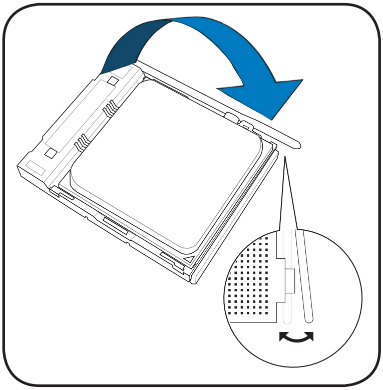


Ensure that the socket lever is lifted up to a 90º angle; otherwise, the CPU will not fit in completely.

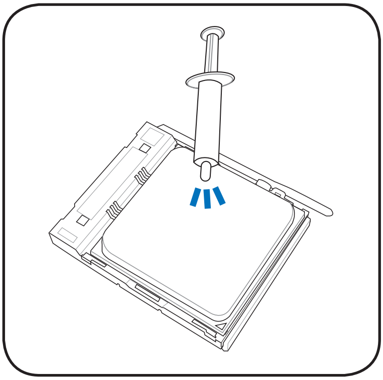
3. Position the CPU above the socket such that the CPU corner with the gold triangle matches the socket corner with a small triangle.
4. Carefully insert the CPU into the socket until it fits in place.



5. When the CPU is in place, push down the socket lever to secure the CPU. The lever clicks on the side tab to indicate that it is locked.



6. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



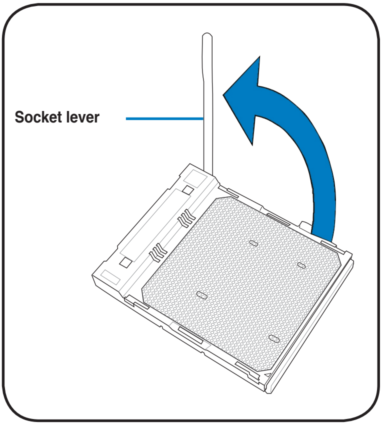
Some heatsinks come with pre-applied thermal paste. If so, skip this step.

The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

1.1.10 AMD AM3+ socket

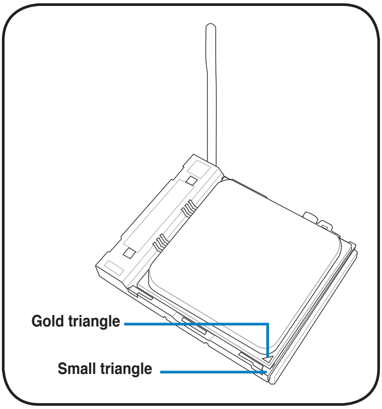
The AMD AM3+ socket is compatible with AMD AM3+ and AM3 processors. Only certain AM3 motherboard models support AM3+ processors by upgrading BIOS. Refer to ASUS support site for details.

1. Locate the CPU socket on the motherboard.
2. Unlock the socket by pressing the lever sideways, then lift it up to a 90º angle.

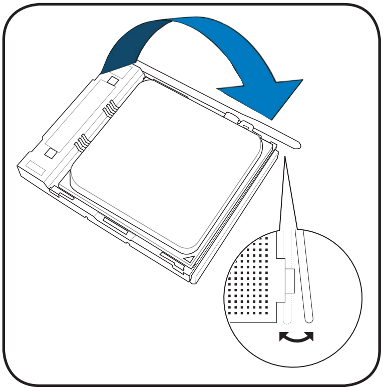


Ensure that the socket lever is lifted up to a 90º angle; otherwise, the CPU will not fit in completely.

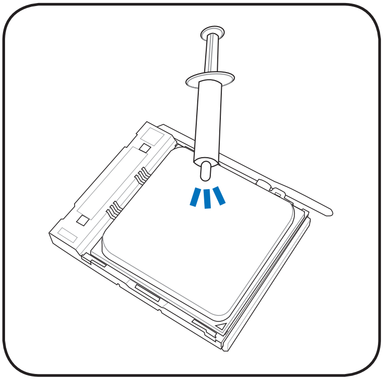
3. Position the CPU above the socket such that the CPU corner with the gold triangle matches the socket corner with a small triangle.
4. Carefully insert the CPU into the socket until it fits in place.



5. When the CPU is in place, push down the socket lever to secure the CPU. The lever clicks on the side tab to indicate that it is locked.



6. Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer.



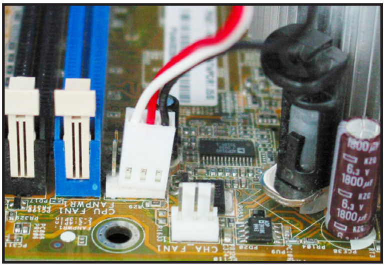
Some heatsinks come with pre-applied thermal paste. If so, skip this step.

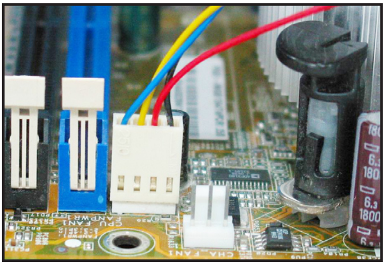
The Thermal Interface Material is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

1.2 Installing the heatsink and fan

To install the CPU heatsink and fan:

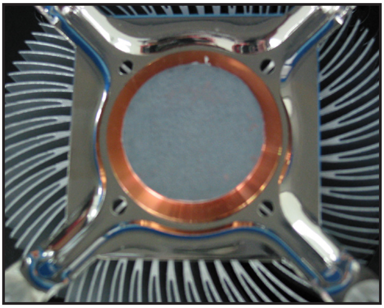
1. Select an Intel-certified or AMD-certified heatsink and fan assembly based on your motherboard. There are 3-pin (left) and 4-pin (right) fan connectors. Only CPU fans with 4-pin connectors supports the ASUS Q-Fan technology.





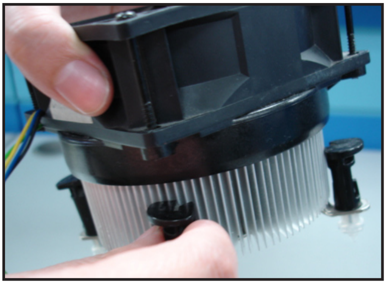
For Intel-certified heatsink:

2. Some heatsinks will come with pre-applied thermal paste. If so, do not scrape it off and remove the protective film only before installation. If not, before installing the heatsink, apply several drops of thermal paste to the exposed area of the CPU that the heatsink will be in contact with. Ensure that it is spread in an even thin layer.

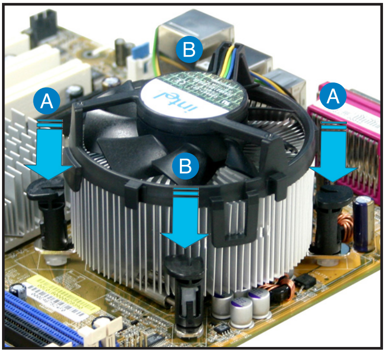


To prevent contaminating the paste, DO NOT spread the paste with your finger directly.

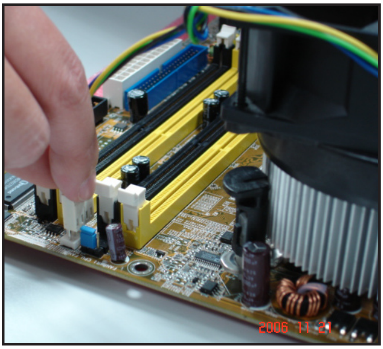
3. Orient each fastener with the narrow end of the groove pointing outward.



4. Push down two fasteners at a time in a diagonal sequence to secure the heatsink and fan assembly in place.



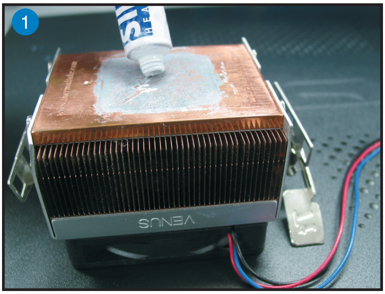
5. Connect the CPU fan cable to the corresponding connector on the motherboard.

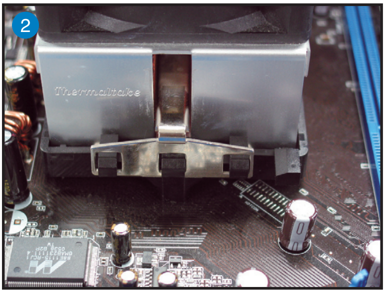


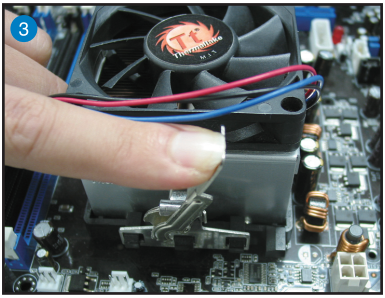
DO NOT forget to connect the CPU fan connector! Hardware monitoring errors can occur if you fail to plug this connector. We suggest you to use an omni-directional heatsink to gain the maximum heat dissipation area.

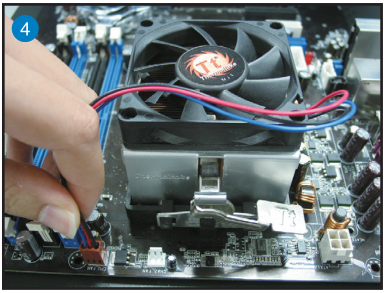
For AMD-certified heatsink:

Follow the instructions below to install an AMD-certified heatsink.




2
Thermaltake


3
Tt
Thermaltake

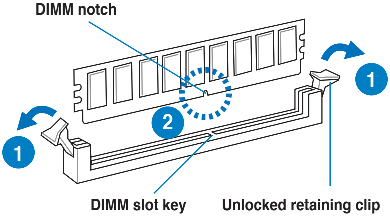

4
Tt
Thermaltake

1.3 Installing a DIMM

Ensure to unplug the power supply before adding or removing DIMMs or other system components. Failure to do so may cause severe damage to both the motherboard and the components.

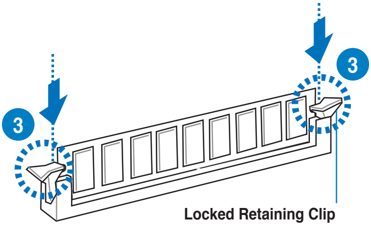
Installing a DIMM on a double clip DIMM socket

1. Unlock a DIMM socket by pressing the retaining clips outward.
2. Align a DIMM on the socket such that the notch on the DIMM matches the DIMM slot key on the socket.



A DIMM is keyed with a notch so that it fits in only one direction. DO NOT force a DIMM into a socket in the wrong direction to avoid damaging the DIMM.

3. Hold the DIMM by both of its ends, then insert the DIMM vertically into the socket. Apply force to both ends of the DIMM simultaneously until the retaining clips snap back into place, and the DIMM cannot be pushed in any further to ensure proper sitting of the DIMM.

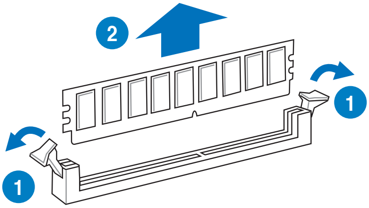


Always insert the DIMM into the socket VERTICALLY to prevent DIMM notch damage.

- To install two or more DIMMs, refer to the user guide bundled in the motherboard package.
- Refer to the user guide for qualified vendor lists of the memory modules.

Removing a DIMM from a double clip DIMM socket

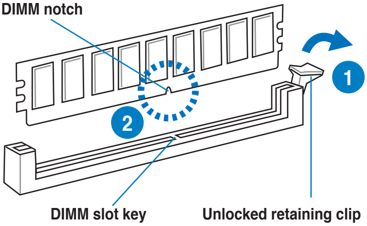
1. Simultaneously press the retaining clips outward to unlock the DIMM.
2. Remove the DIMM from the socket.



Support the DIMM lightly with your fingers when pressing the retaining clips. The DIMM might get damaged when it flips out with extra force.

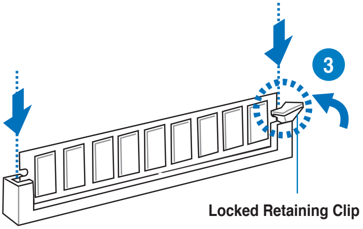
Installing a DIMM on a single clip DIMM socket

1. Unlock a DIMM socket by pressing the retaining clip outward.
2. Align a DIMM on the socket such that the notch on the DIMM matches the DIMM slot key on the socket.



A DIMM is keyed with a notch so that it fits in only one direction. DO NOT force a DIMM into a socket in the wrong direction to avoid damaging the DIMM.

3. Hold the DIMM by both of its ends, then insert the DIMM vertically into the socket. Apply force to both ends of the DIMM simultaneously until the retaining clip snaps back into place, and the DIMM cannot be pushed in any further to ensure proper sitting of the DIMM.

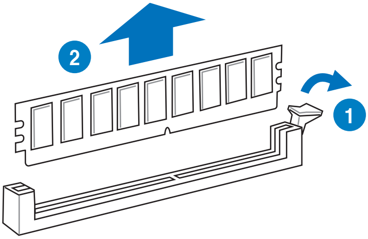


Always insert the DIMM into the socket VERTICALLY to prevent DIMM notch damage.

- To install two or more DIMMs, refer to the user guide bundled in the motherboard package.
- Refer to the user guide for qualified vendor lists of the memory modules.

Removing a DIMM from a single clip DIMM socket

1. Press the retaining clip outward to unlock the DIMM.
2. Remove the DIMM from the socket.

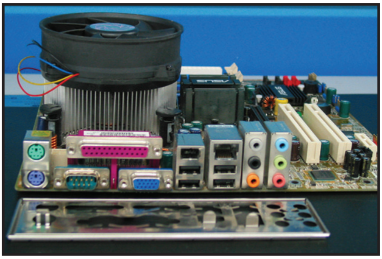


Support the DIMM lightly with your fingers when pressing the retaining clips. The DIMM might get damaged when it flips out with extra force.

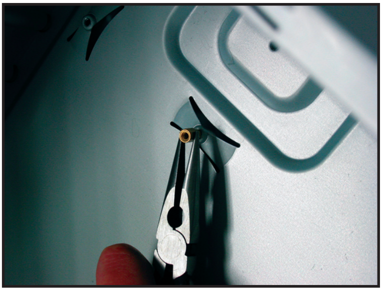
1.4 Installing the motherboard

1. I/O ports differ with motherboards. Use and install the rear I/O shield that comes with the motherboard package only.

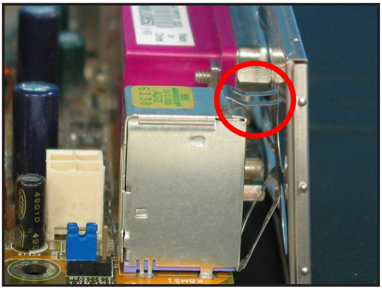
Some sharp edges and points might cause physical injury. We recommend you put on cut or puncture resistant gloves before motherboard and I/O shield installation.



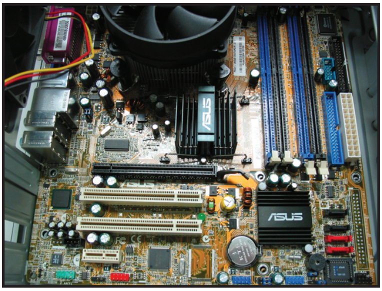
2. Install the standoffs to the matched screw holes on the metal plate.



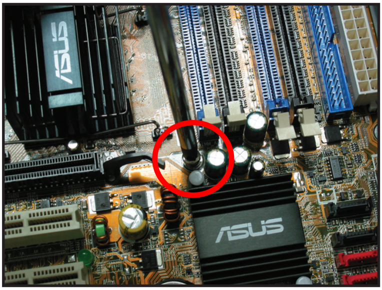
3. The I/O shield edge springs may damage the I/O ports. Be cautious when installing the I/O shield.



4. Position the I/O side of the motherboard toward the rear of the chassis and place the motherboard into the chassis.



5. Insert and loosely tighten each screw in a diagonal sequence first. After all the screws have been inserted, drive the screws until they are finger-tight.



- You may remove the metal slot covers for the expansion cards at the back of the chassis before installing the motherboard. For some chassis models, it might be difficult to remove the expansion slot cover after the installation.
- DO NOT over-tighten the screws. Doing so may damage the motherboard.

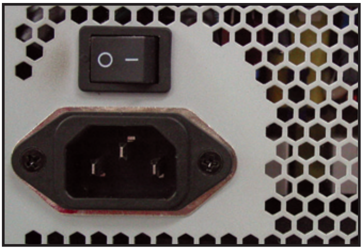
1.5 Installing the power supply unit

There are two kinds of commonly-used power supply units. One is with Active Power Factor Correction (PFC) and the other with passive PFC.

1. Select a power supply unit.

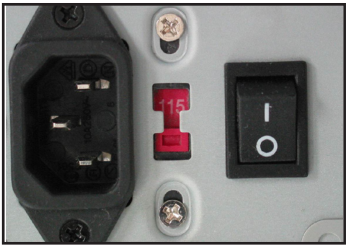
Power supply with active PFC:

Active PFC automatically corrects the AC input voltage.



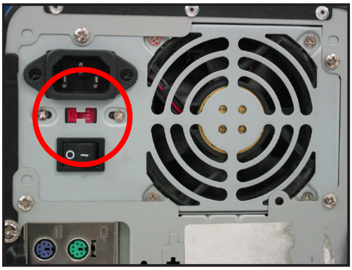
Power supply with passive PFC:

Passive PFC requires user to manually adjust the AC input voltage.



2. If you are using a power supply with passive PFC, adjust to the correct AC input voltage in your area.

Failure to adjust the power supply to the correct AC input voltage will seriously damage the system.



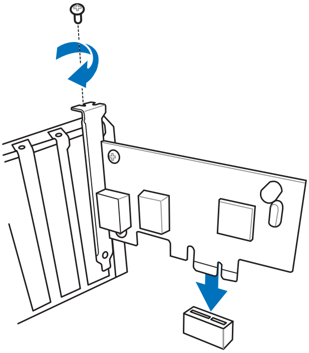
Use power supply units with safety certification only. Using unstable power supply units can damage your motherboard and other components. Refer to the user guide for power supply units that meet the motherboard requirements.

1.6 Installing an expansion card

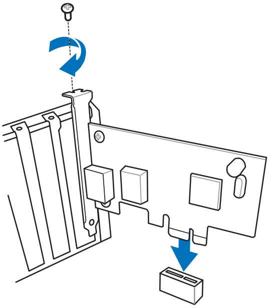
To install an expansion card:

1. Remove the metal slot cover opposite the expansion card slot where you wish to install an expansion card.
2. Install the expansion card and ensure that it is properly seated on the slot.
3. Screw to secure the card on the slot.
4. Repeat the previous steps to install another expansion card.

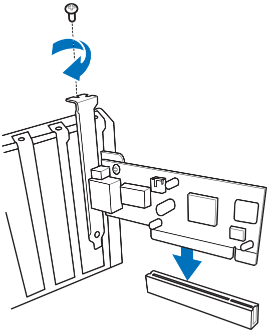
PCIE x16 card



PCIE x1 card



PCI card

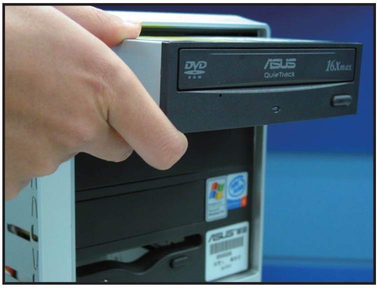


- Refer to the card documentation for the card configuration details, and to the motherboard user guide in case you need to configure any jumpers after installing the expansion card.
- Refer to the motherboard user guide for the instructions of the expansion card signal cable connection.

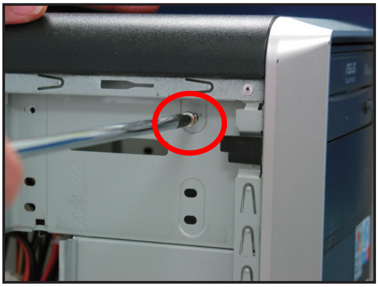
1.7 Installing disk drives

1.7.1 PATA optical disk drive

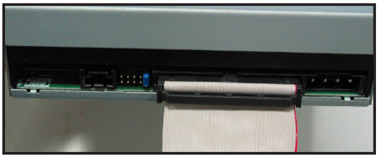
1. Remove the dummy cover and slide the optical disk drive into the bay.



2. Align with the screw holes and secure the disk drive with screws.

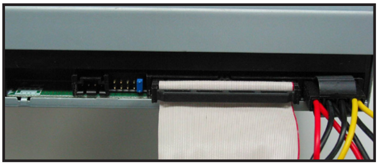


3. Orient and plug the IDE cable into the optical drive. The red stripe on the IDE cable is the pin1 end and should match the dimple marking Pin1 on the optical drive.

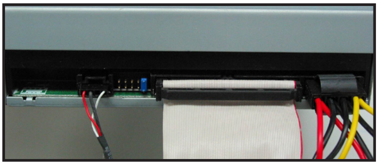


IDE cables are dummy-proof. Never force the IDE cable into the connector.

4. Connect the 4-pin power cable to the optical drive.

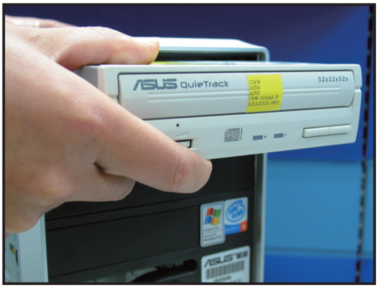


5. Attach the audio cable to the connector on the optical drive.

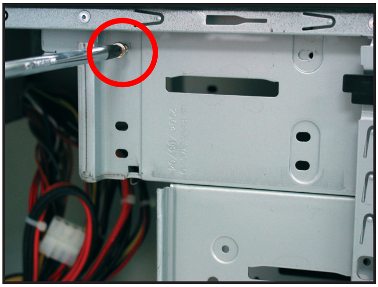


1.7.2 SATA optical disk drive

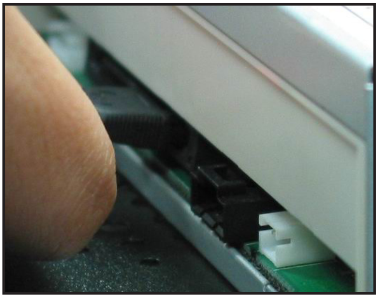
1. Remove the dummy cover and slide the optical disk drive into the bay.



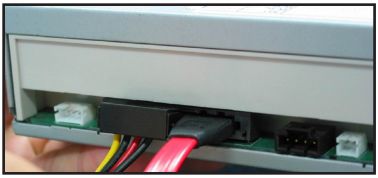
2. Align with the screw holes and secure the disk drive with screws.



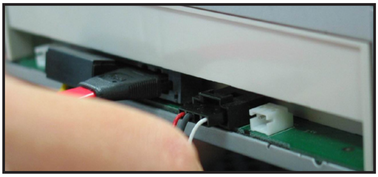
3. Orient and plug the SATA cable into the optical drive. SATA cables are dummy-proof. Never force a SATA cable into the connector.



4. Connect the SATA power cable to the the optical drive.

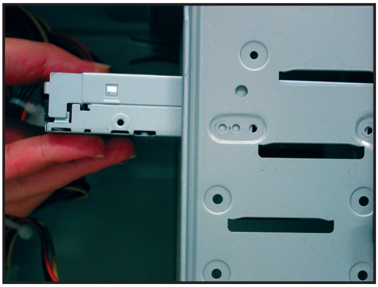


5. Attach the audio cable to the connector on the optical drive.

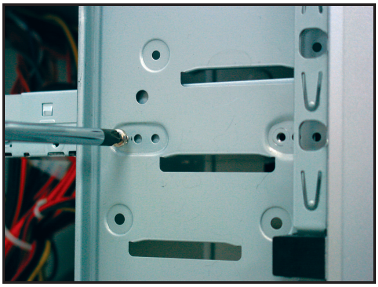


1.7.3 Floppy disk drive

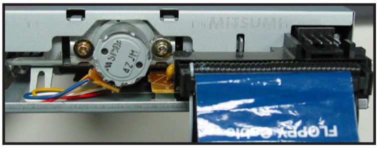
1. Remove the dummy cover and insert the floppy disk drive into the bay.



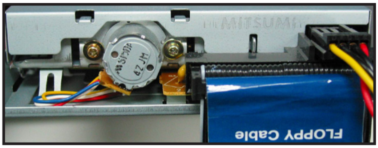
2. Align with the screw holes and secure the disk drive with screws.



3. Orient and plug the floppy interface cable into the floppy disk drive. The red stripe on the cable is the pin1 end and should match pin1 on the floppy disk drive.

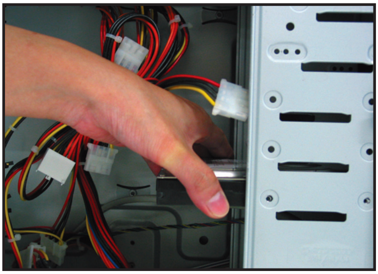


4. Connect the floppy power cable to the connector at the back of the floppy disk drive.

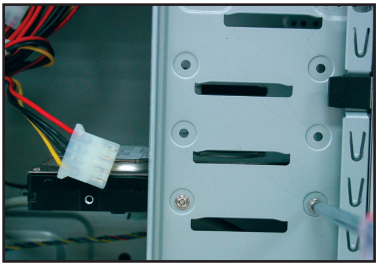


1.7.4 PATA hard disk drive

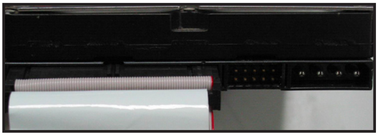
1. Insert the PATA hard disk drive into the bay.



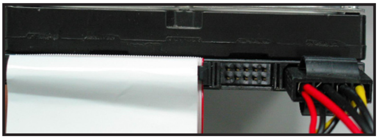
2. Align with the screw holes and secure the disk drive with screws.



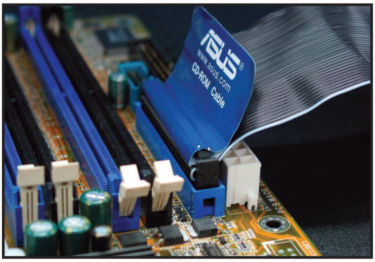
3. Orient and connect the signal cable to the hard disk drive. The red stripe on the cable is the pin1 end. Match the dummy-proof notch and do not force the cable into the connector.



4. Connect the 4-pin power cable to the connector at the back of the hard disk drive.

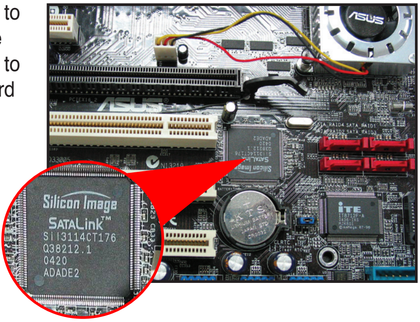


5. Attach the other end of the signal cable to the corresponding slot on the motherboard.



Notes for installing PATA hard disk drive

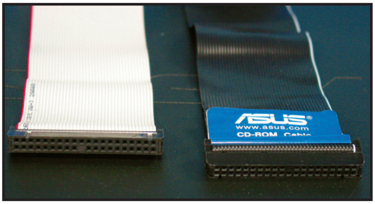
- If your operating system is installed to the hard disk drive controlled by the RAID or other controllers, you have to install the controller driver to the hard disk first.


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

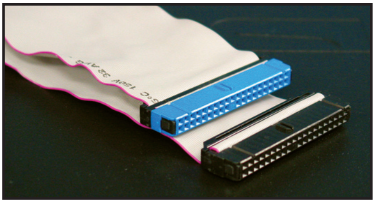
- The cables are designed with pull tabs. Just easily install the disk drives based on the cable labels. To prevent damaging the pins, pull the cable tabs to disconnect the cable.

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

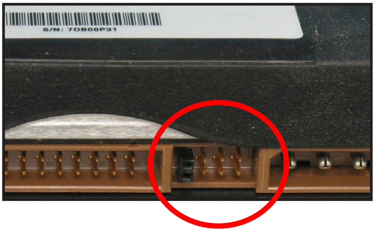
- There are two cables for ATA IDE disk drives, the newer 80-wire (right) and the older 40-wire (left) cables. For ATA66/100/133 disk drives, only the 80-wire cable can offer a better performance. The 40-wire cables are usually for the optical drives.


ASUS
www.asus.com
CD-ROM Cable

- The cable connector is color-coded. The blue one is for the host connector, and the black/gray one is for the primary/secondary disk drive.

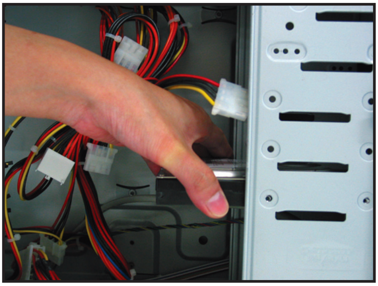


- When connecting two IDE devices, you have to set the jumpers to different position, one in master and one in slave. If you are using an 80-wire cable, you can use the cable select style.

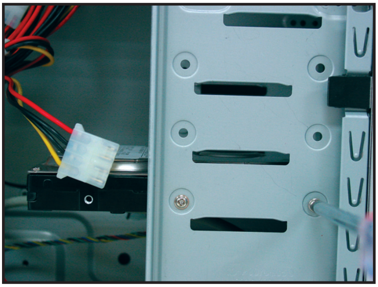

S/N: 7DB00P31

1.7.5 SATA hard disk drive

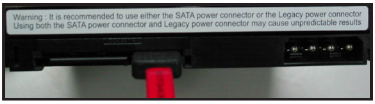
1. Insert the SATA hard disk drive into the bay.



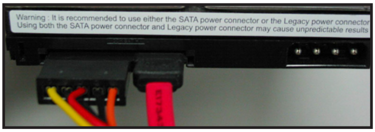
2. Align with the screw holes and secure the disk drive with screws.



3. Orient and connect the SATA cable to the hard disk drive. The cable can only fit in one direction.

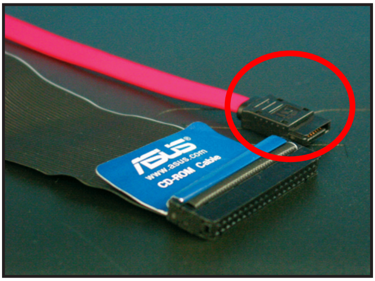

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Connect the SATA power cable to the connector at the back of the hard disk drive.

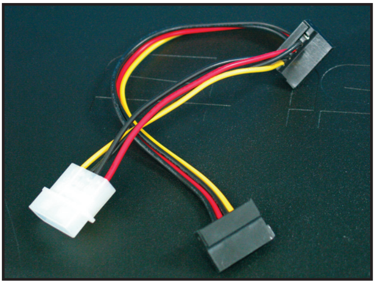

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Notes for installing SATA hard disk drive

- Serial ATA (SATA) interface provides higher data transmission speed, and better voltage tolerance. The narrow design of the SATA cable also solves cabling issues and allows better airflow in the chassis.

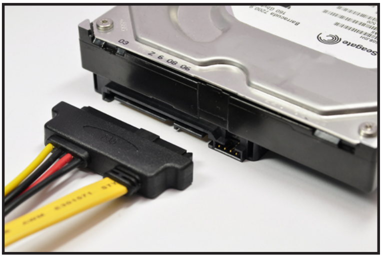

/ISUS
www.asus.com
CD-ROM Cable

- The SATA power cable connector is different from the traditional 4-pin power connector. ASUS motherboard bundles power adapter cables for you in case your power supply unit does not include this new connector.

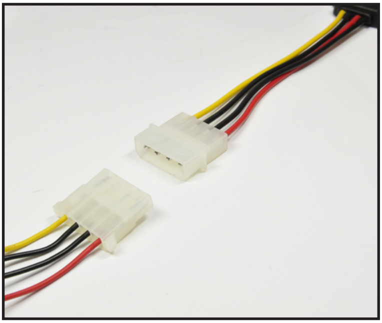


1.7.6 SAS hard disk drive

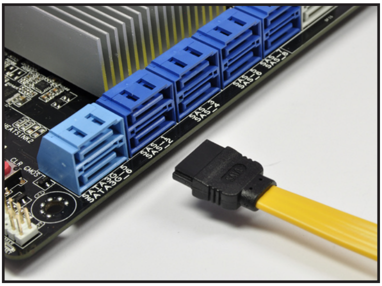
1. Orient and connect the SAS signal / power combo cable to the hard disk drive. The cable can only fit in one direction.



2. Connect the SAS power cable to the power connector on the power supply unit.



3. Connect the SAS signal cable to the SAS connector on the motherboard.

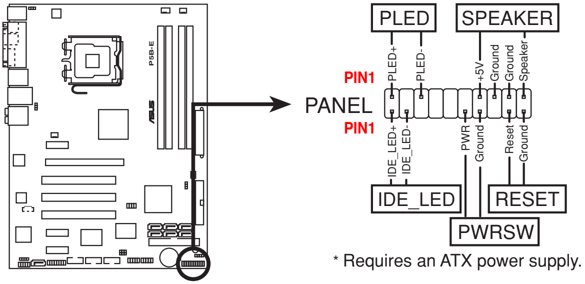


1.8 Front panel cables

To connect the front panel cables:

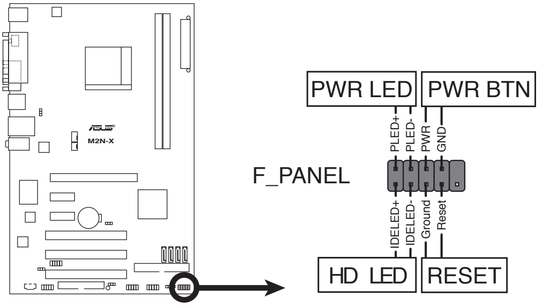
- RESET (Reset Switch)
- PLED (Power LED)
- PWRSW (Power Switch)
- IDE_LED (IDE Hard Disk Active LED)
- SPEAKER (Speaker Connector)

20-8 pin front panel connector


P5B-E
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

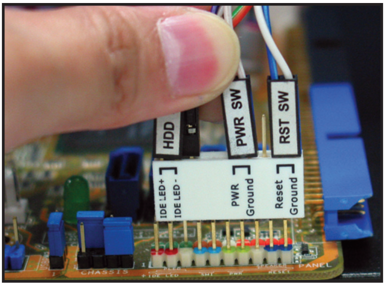
10-1 pin front panel connector


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- The front panel cables of your chassis may differ with models or designs. Connect these connectors to the motherboard according to the label.
- If the LEDs do not light up and the pin location is correct, you might have mistaken the ground pins with the signal pins. Usually the white wire stands for the ground pins and the color-coded wire for the signal pins.
- The SPEAKER, RESET and PWRSW front panel cables have no specific orientation, while IDE_LED and PLED cables do. Connect the cable PIN1 to the connector PIN1 on the motherboard.
- The front panel connector varies with your motherboard model, refer to the user guide for more information.

ASUS Q-Connector

ASUS Q-Connector's one step installation saves your time from struggling with the messy front panel cables. Refer to the user guide for details.

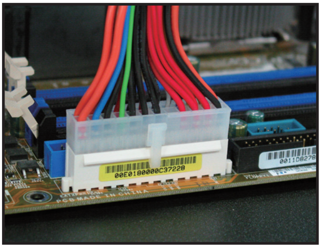


The Q-connector is available in selected models. Refer to the user guide for details.

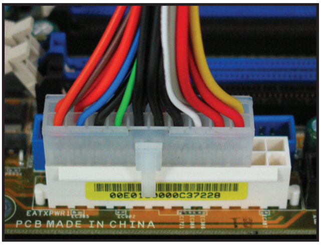
1.9 Connecting the ATX power

The ATX power connectors can fit in only one orientation. Use the side clip to hook the connectors to the motherboard. DO NOT force the male power connectors into the female counterparts on the motherboard. Usually there will be two connectors on the motherboard: 24-pin and 4-pin power connectors. Some older power supply units may only have 20-pin power connector which also fits the 24-pin power connector on the motherboard.

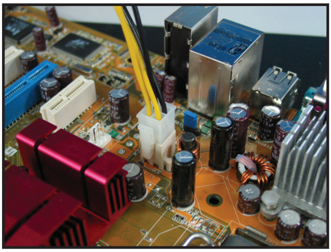
24-pin power connector



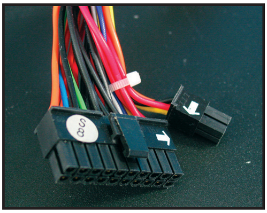
20-pin power connector
(on the 24-pin female counterpart)

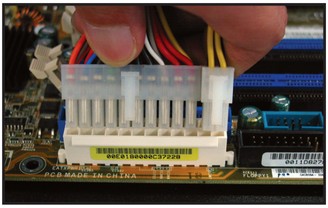


4-pin power connector



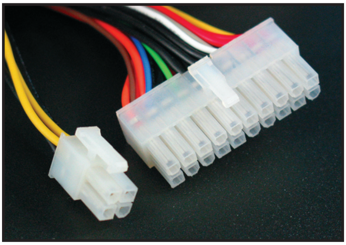
- DO NOT attach the external AC power when connecting the power connectors to the motherboard.
- Ensure the power connectors are firmly secured to the motherboard.
- If your power supply supports 20-pin+4-pin, you are able to combine these two connectors and install to the 24-pin connectors on the motherboard.



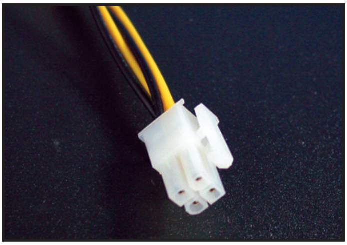


Power connectors

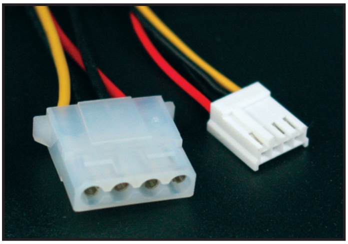
20+4 (24) pin ATX connector



4-pin ATX connector

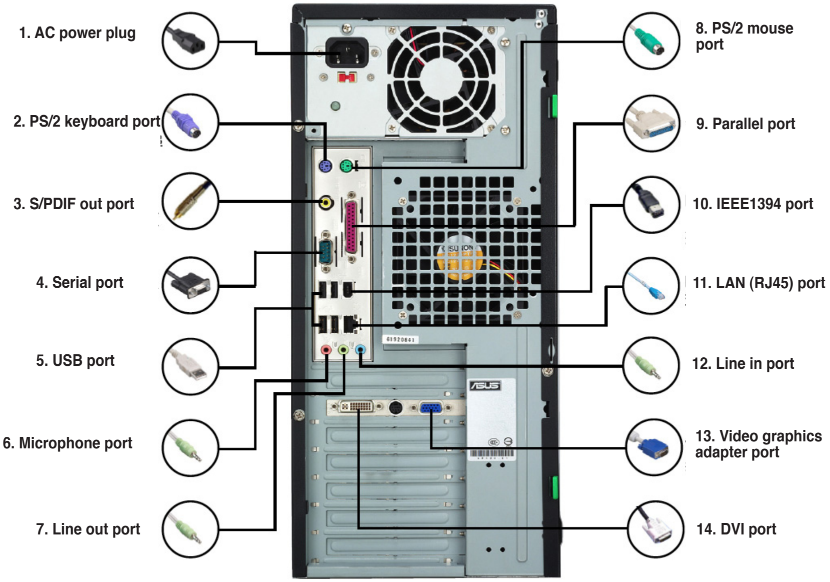


peripheral power connector (left)
floppy power connector (right)



1.10 Peripheral devices and accessories

Refer to the figure for connecting the peripheral devices and accessories.


1. AC power plug
2. PS/2 keyboard port
3. S/PDIF out port
4. Serial port
5. USB port
6. Microphone port
7. Line out port
8. PS/2 mouse port
9. Parallel port
10. IEEE1394 port
11. LAN (RJ45) port
12. Line in port
13. Video graphics adapter port
14. DVI port

1. AC Power plug + power extension cord

2. PS/2 keyboard port + keyboard

3. S/PDIF out port + digital 5.1 speaker system

4. Serial port + PDA dock

5. USB port + USB devices

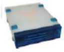
6. Microphone port + microphone

7. Line out port + speaker

8. PS/2 mouse port + mouse

9. Parallel port + printer

10. IEEE1394 port + external hard disk drive



11. LAN (RJ45) port + modem

12. Line in port + recorder

13. VGA port + CRT monitor

14. DVI port + LCD monitor

The rear panel connectors vary with models. Refer to the user guide for details.

1.11 Starting up for the first time

The system then runs the power-on self tests or POST. While the tests are running, the BIOS beeps.

BIOS Beep	Description
One continuous beep followed by three short beeps	No VGA detected
One continuous beep followed by two short beeps then a pause (repeated)	No memory detected
One continuous beep followed by four short beeps	Hardware component failure (AMI BIOS)
Four short beeps	Hardware component failure (AWARD BIOS)

Troubleshooting

Trouble	Action
• Cannot turn on the computer • Power LED is not lit. • Power supply fan is not working.	Ensure the power cord is connected correctly.
The computer is on but the monitor is black.	• Ensure the monitor power is on and the VGA cable is connected correctly. • Adjust the monitor brightness and contrast. • Shut down the computer and remove the power cord. Check whether the VGA card is installed firmly.
No memory detected	• Ensure the memory module is correct. • Ensure the DIMMS are firmly seated on the DIMM socket. • Ensure the memory module is from the qualified vedor list. Refer to the user guide for the QVL.
Floppy Error (The indicator is always lit or a warning message pops on the screen.)	• Check the BIOS configuration about floppy disk drive. • Ensure the cables for the floppy disk drive is plugged correctly.
Hard/optical disk drive error (not recognized or detected)	• Ensure the jumper setting is correct. (Master/Slave) • Check the BIOS configuration about hard/optical disk drive. • Ensure the device cables are firmly attached. • Ensure the device drivers are installed.

Chapter 2: Manage/update BIOS

2.1 AFUDOS utility

The AFUDOS utility allows you to update the BIOS file in DOS environment using a bootable floppy disk with the updated BIOS file. This utility also allows you to copy the current BIOS file that you can use as backup when the BIOS fails or gets corrupted during the updating process.

Copying the current BIOS

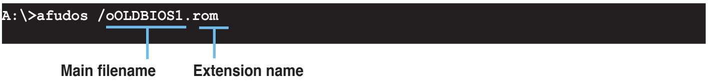
To copy the current BIOS file using the AFUDOS utility:

- Ensure that the floppy disk is not write-protected and has at least 1024KB free space to save the file.
- The succeeding BIOS screens are for reference only. The actual BIOS screen displays may not be same as shown.

1. Copy the AFUDOS utility (afudos.exe) from the motherboard support CD/DVD to a bootable floppy disk.
2. Boot the system in DOS mode, then at the prompt type:

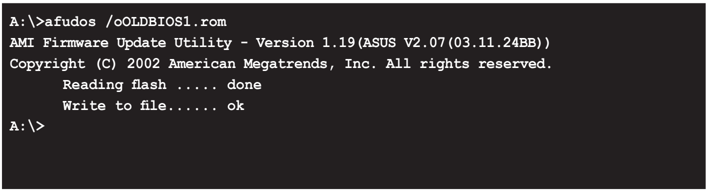
   `afudos /o[filename]`

   where the [filename] is any user-assigned filename not more than eight alphanumeric characters for the main filename and three alphanumeric characters for the extension name.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Press <Enter>. The utility copies the current BIOS file to the floppy disk.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
      Reading flash ..... done
      Write to file...... ok
A:\>
```

   The utility returns to the DOS prompt after copying the current BIOS file.

Updating the BIOS file

To update the BIOS file using the AFUDOS utility:

1. Visit the ASUS website (www.asus.com) and download the latest BIOS file for the motherboard. Save the BIOS file to a bootable floppy disk.

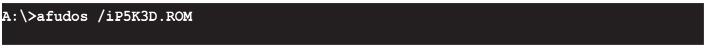
Write the BIOS filename on a piece of paper. You need to type the exact BIOS filename at the DOS prompt.

2. Copy the AFUDOS utility (afudos.exe) from the motherboard support DVD to the bootable floppy disk you created earlier.

3. Boot the system in DOS mode, then at the prompt type:

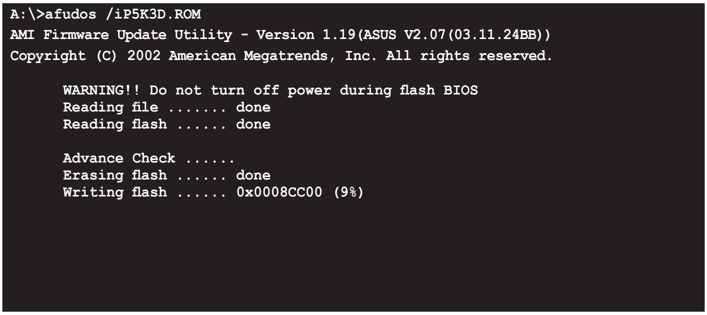
   `afudos /i[filename]`

   where [filename] is the latest or the original BIOS file on the bootable floppy disk.



```
A:\>afudos /iP5K3D.ROM
```

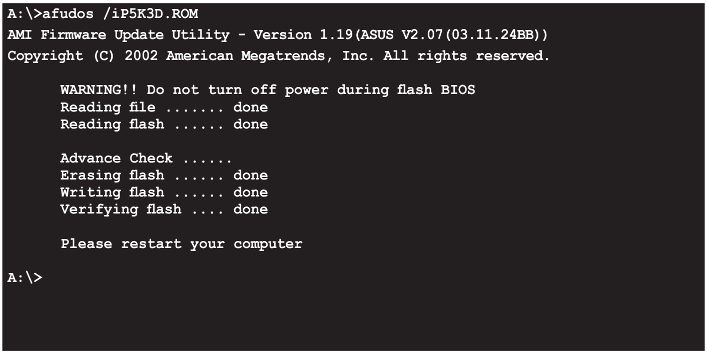
4. The utility verifies the file and starts updating the BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

      WARNING!! Do not turn off power during flash BIOS
      Reading file ....... done
      Reading flash ...... done

      Advance Check ......
      Erasing flash ...... done
      Writing flash ...... 0x0008CC00 (9%)
```

DO NOT shut down or reset the system while updating the BIOS to prevent system boot failure!

5. The utility returns to the DOS prompt after the BIOS update process is completed. Reboot the system from the hard disk drive.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

      WARNING!! Do not turn off power during flash BIOS
      Reading file ....... done
      Reading flash ...... done

      Advance Check ......
      Erasing flash ...... done
      Writing flash ...... done
      Verifying flash .... done

      Please restart your computer

A:\>
```

2.2 Award BIOS Flash Utility

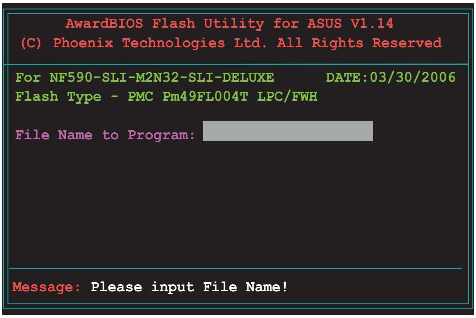
Updating the BIOS

The Basic Input/Output System (BIOS) can be updated using the AwardBIOS Flash Utility. Follow these instructions to update the BIOS using this utility.

1. Download the latest BIOS file from the ASUS web site. Rename the file to XXXXX.BIN (model name.BIN)and save it to a floppy disk, CD ROM or a USB flash disk in **FAT 16/12 format**.

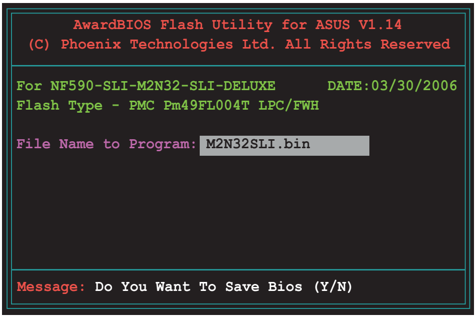
Save only the updated BIOS file in the disk to avoid loading the wrong BIOS file.

2. Copy the AwardBIOS Flash Utility (awdflash.exe) from the Software folder of the support CD to the floppy disk, CD ROM or a USB flash disk with the latest BIOS file.
3. Boot the system in DOS mode using the bootable floppy disk, CD ROM or a USB flash disk you created earlier.
4. Under the DOS mode, use <X:> (X stands for the name of the disk assignment) to switch to the folder of floppy disk, CD ROM or USB flash disk you saved the BIOS file and AwardBIOS Flash Utility.
5. At the prompt, type awdflash then press <Enter>. The Award BIOS Flash Utility screen appears.



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

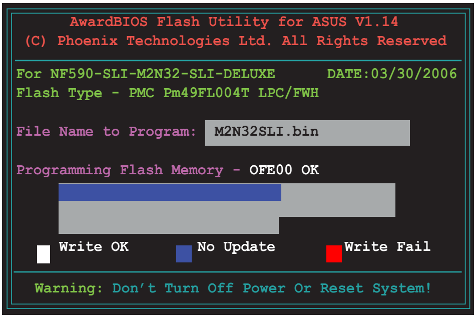
6. Type the BIOS file name in the File Name to Program field, then press <Enter>.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Press <N> when the utility prompts you to save the current BIOS file. The following screen appears.

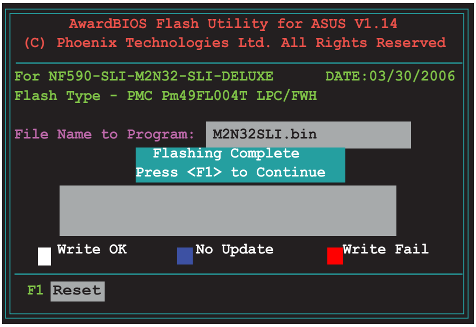
8. The utility verifies the BIOS file in the floppy disk, CD ROM or a USB flash disk and starts flashing the BIOS file.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

  ☐ Write OK        ▨ No Update        🟥 Write Fail

 Warning: Don't Turn Off Power Or Reset System!
```

DO NOT turn off or reset the system during the flashing process!

9. The utility displays a Flashing Complete message indicating that you have successfully flashed the BIOS file. Remove the disk then press <F1> to restart the system.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                     Flashing Complete
                   Press <F1> to Continue

  ☐ Write OK        ▨ No Update        🟥 Write Fail

 F1 Reset
```

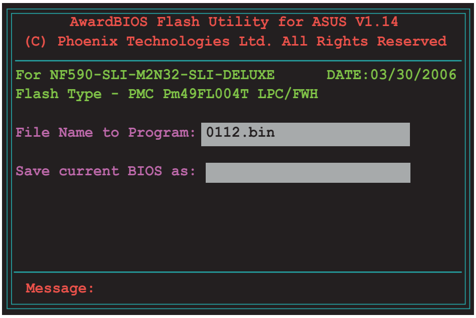
Saving the current BIOS file

You can use the AwardBIOS Flash Utility to save the current BIOS file. You can load the current BIOS file when the BIOS file gets corrupted during the flashing process.

Ensure that the floppy disk, CD ROM or a USB flash disk has enough disk space to save the file.

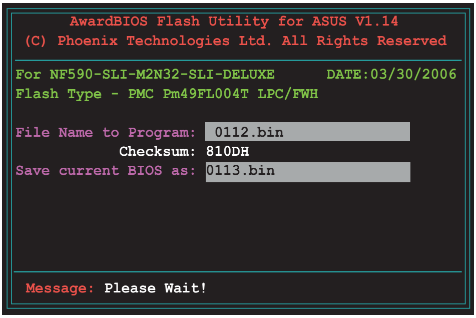
To save the current BIOS file using the AwardBIOS Flash Utility:

1. Follow steps 1 to 6 of the previous section.
2. Press <Y> when the utility prompts you to save the current BIOS file. The following screen appears.



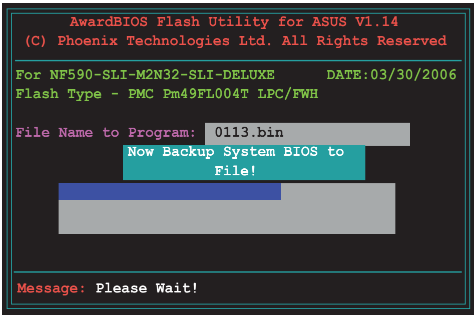
```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Type a filename for the current BIOS file in the Save current BIOS as field, then press <Enter>.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. The utility saves the current BIOS file to the disk, then returns to the BIOS flashing process.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
            Now Backup System BIOS to
                      File!

Message: Please Wait!
```

2.3 ASUS Update utility

The ASUS Update is a utility that allows you to manage, save, and update the motherboard BIOS in Windows® environment. The ASUS Update utility allows you to:

- • Save the current BIOS file
- • Download the latest BIOS file from the Internet
- • Update the BIOS from an updated BIOS file
- • Update the BIOS directly from the Internet
- • View the BIOS version information

This utility is available in the support DVD that comes with the motherboard package.

ASUS Update requires an Internet connection either through a network or an Internet Service Provider (ISP).

Installing ASUS Update

To install ASUS Update:

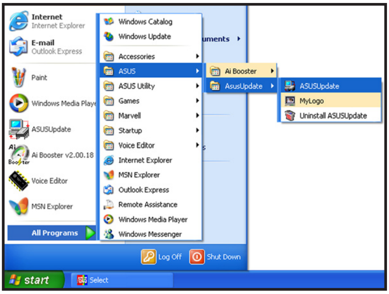
1. Place the support DVD in the optical drive.
2. From the **Main** menu, click the **Utilities** tab, and then click **Install ASUS Update VX.XX.XX**.
3. The ASUS Update utility is copied to your system.

Updating the BIOS through the Internet

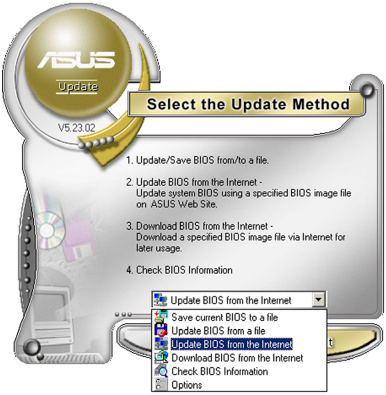
Quit all Windows® applications before you update the BIOS using this utility.

To update the BIOS through the Internet

1. From the Windows® desktop, click **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate.** The ASUS Update main window appears.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. Select **Update BIOS from the Internet** from the drop-down menu, and then click **Next**.


ASUS
Update
V5.23.02
Select the Update Method
Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

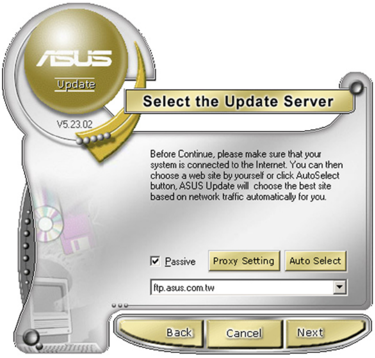
1. Update/Save BIOS from/to a file.

2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

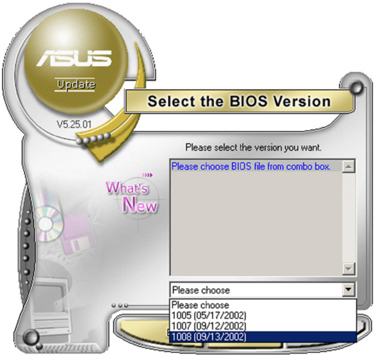
3. Select the ASUS FTP site nearest you to avoid network traffic, or click **Auto Select**. Click **Next**.


ASUS
Update
V5.23.02
Select the Update Server
☑ Passive
Proxy Setting
Auto Select
Back
Cancel
Next

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

ftp.asus.com.tw

4. From the FTP site, select the BIOS version that you wish to download. Click **Next**.


ASUS
Update
V5.25.01
Select the BIOS Version
What's New
Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

Please select the version you want.

Please choose BIOS file from combo box.

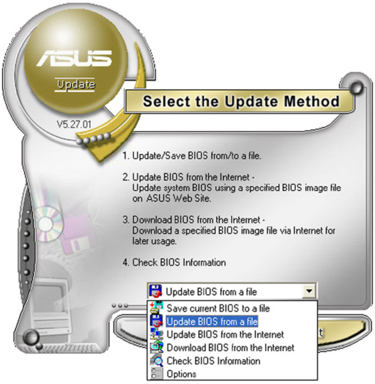
5. Follow the onscreen instructions to complete the update process.

The ASUS Update utility is capable of updating itself through the Internet. Always update the utility to avail all its features.

Updating the BIOS through a BIOS file

To update the BIOS through a BIOS file

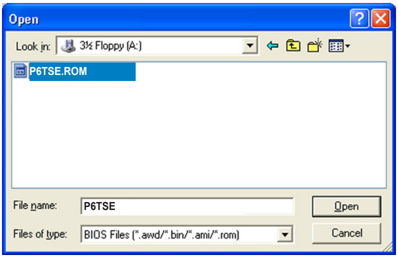
1. Fom the Windows® desktop, click **Start** > **Programs** > **ASUS** > **ASUSUpdate** > **ASUSUpdate**. The ASUS Update main window appears.
2. Select **Update BIOS from a file** from the dropdown menu, then click **Next**.
3. Locate the BIOS file from the Open window, then click **Open**.


ASUS
Update
V5.27.01
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

4. Follow the onscreen instructions to complete the update process.


Open
P6TSE.ROM
Open
Cancel

Look in: 3½ Floppy (A:)

File name: P6TSE

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the **Load Setup Defaults** item under the **Exit** menu.

2.4 ASUS BIOS Updater

The ASUS BIOS Updater allows you to update BIOS in DOS environment. This utility also allows you to copy the current BIOS file that you can use as a backup when the BIOS fails or gets corrupted during the updating process.

The succeeding utility screens are for reference only. The actual utility screen displays may not be same as shown.

Before updating BIOS

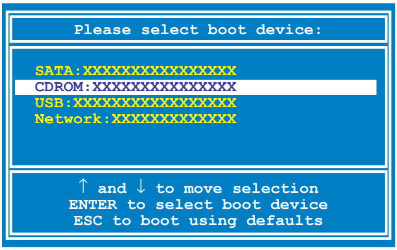
1. Prepare the motherboard support DVD and a USB flash drive in FAT32/16 format and single partition.
2. Download the latest BIOS file and BIOS Updater from the ASUS website at http://support.asus.com and save them on the USB flash drive.

- NTFS is not supported under DOS environment. Do not save the BIOS file and BIOS Updater to a hard disk drive or USB flash drive in NTFS format.
- Do not save the BIOS file to a floppy disk due to low disk capacity.

3. Turn off the computer and disconnect all SATA hard disk drives (optional).

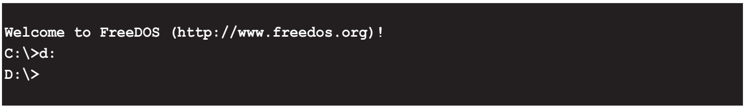
Booting the system in DOS environment

1. Insert the USB flash drive with the latest BIOS file and BIOS Updater to the USB port.
2. Boot your computer. When the ASUS Logo appears, press <F8> to show the **BIOS Boot Device Select Menu**. Insert the support DVD into the optical drive and select the optical drive as the boot device.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

↑ and ↓ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. When the **Make Disk** menu appears, select the **FreeDOS command prompt** item by pressing the item number.
4. At the FreeDOS prompt, type `d:` and press <Enter> to switch the disk from Drive C (optical drive) to Drive D (USB flash drive).



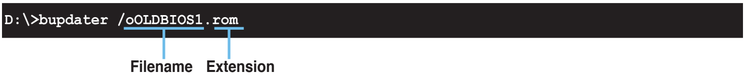
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Backing up the current BIOS

To backup the current BIOS file using the BIOS Updater

Ensure that the USB flash drive is not write-protected and has enough free space to save the file.

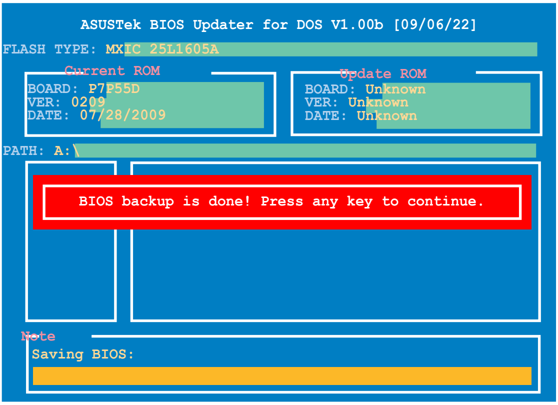
1. At the FreeDOS prompt, type **`bupdater /o[filename]`** and press <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

The [filename] is any user-assigned filename with no more than eight alphanumeric characters for the filename and three alphanumeric characters for the extension.

2. The BIOS Updater backup screen appears indicating the BIOS backup process. When BIOS backup is done, press any key to return to the DOS prompt.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                     Update ROM
BOARD: P7P55D                   BOARD: Unknown
VER: 0209                       VER: Unknown
DATE: 07/28/2009                DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

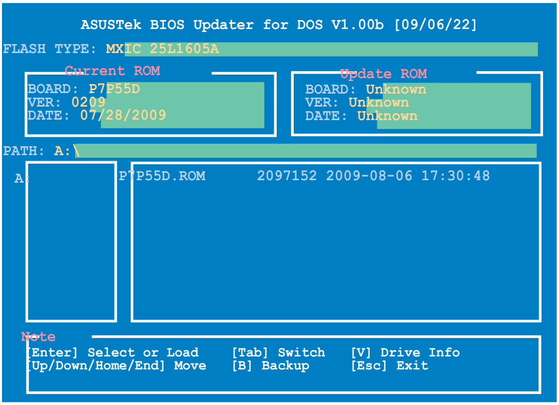
Updating the BIOS file

To update the BIOS file using BIOS Updater

1. At the FreeDOS prompt, type `bupdater /pc /g` and press <Enter>.

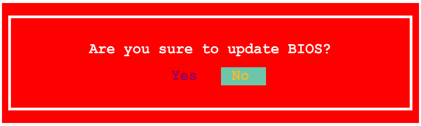
```
D:\>bupdater /pc /g
```

2. The BIOS Updater screen appears as below.



```
         ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
      Current ROM                     Update ROM
  BOARD: P7P55D                  BOARD: Unknown
  VER: 0209                      VER: Unknown
  DATE: 07/28/2009               DATE: Unknown
PATH: A:\
 A          P7P55D.ROM      2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load     [Tab] Switch     [V] Drive Info
  [Up/Down/Home/End] Move    [B] Backup       [Esc] Exit
```

3. Press <Tab> to switch between screen fields and use the <Up/Down/Home/End> keys to select the BIOS file and press <Enter>. BIOS Updater checks the selected BIOS file and prompts you to confirm BIOS update.



```
Are you sure to update BIOS?
        Yes    No
```

4. Select **Yes** and press <Enter>. When BIOS update is done, press <ESC> to exit BIOS Updater. Restart your computer.

DO NOT shut down or reset the system while updating the BIOS to prevent system boot failure!

- For BIOS Updater version 1.04 or later, the utility automatically exits to the DOS prompt after updating BIOS.
- Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the **Load Setup Defaults** item under the **Exit** BIOS menu. See Chaper 3 of your motherboard user manual for details.
- Ensure to connect all SATA hard disk drives after updating the BIOS file if you have disconnected them.

Chapter 3: Troubleshooting

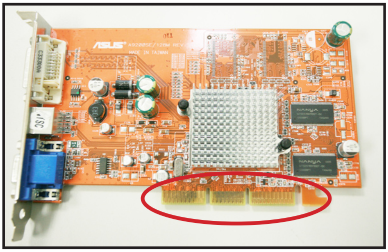
3.1 Troubleshooting for Motherboard DIY

After assembling your own computer, you might encounter troubles in starting it up. This chapter provides answers to some common questions about your PC before entering the operating system. Read this chapter for basic troubleshooting. It saves time and hassles for you on contacting ASUS technical support team or returning the product for warranty service.

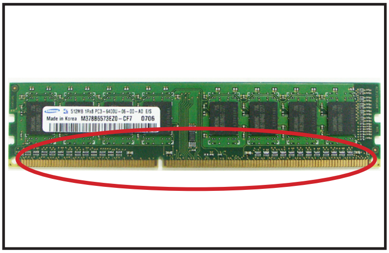
3.1.1 Basic troubleshooting

A. Bad connection

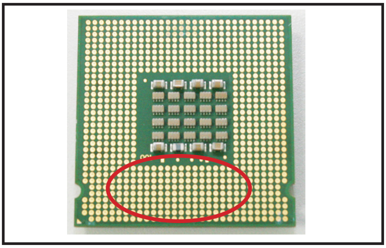
1. Ensure there is no contaminants on the gold contact or the pins.
2. Use a cotton bud or an eraser and gently rub the gold contact. Remember to brush away the eraser crumbs.



VGA card gold contact



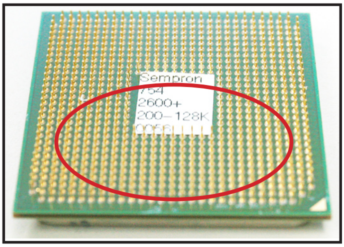
DIMM gold contact



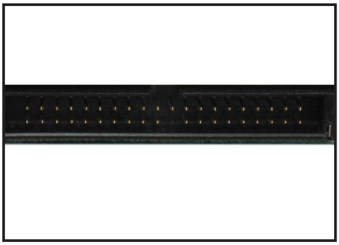
LGA775 processor gold contact points

Handle the card or the CPU by its edges and DO NOT touch the gold contact. Static electricity will seriously damage the device.

3. Ensure there is no broken or bended pins on your connector pins or CPU pins. A broken and bended pin will cause the component malfunction. Contact your retailer for further support.



AMD CPU gold pins

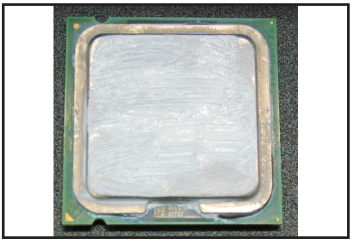


Connector pins

If the broken or bended pins are caused after the purchase, your retailer may ask for repair charge. Sometimes the broken or bended pins are NOT REPAIRABLE.

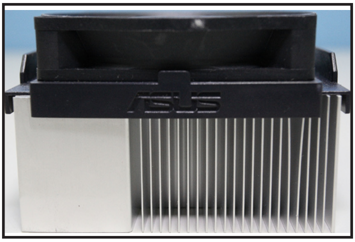
B. CPU overheated

1. Wipe clean the CPU surface with the clean cloth. Apply several drops of thermal paste to the exposed area of the CPU that the heatsink will be in contact with. Ensure that it is spread in an even thin layer.

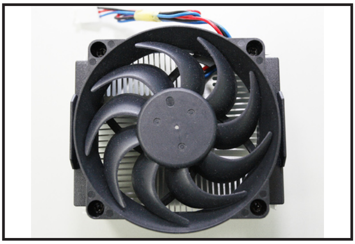


CPU surface

2. Ensure there is no contaminants on the heatsink and fan.



Side view of heatsink and fan



Top view of heatsink and fan

3. Follow the instructions of heatsink and fan manufacturers to clean the contaminants that will slow down the fan rotation.

3.2 Other common troubles

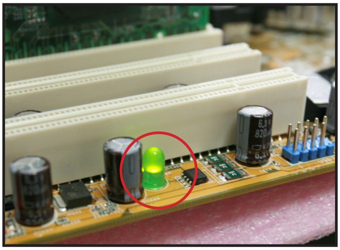
- When removing devices from the system, ensure all the power cables are unplugged.
- All the error messages will be displayed on screen during the Power-On Self-Test (POST).
- If there are BIOS beeps, refer to section 1.11 for details.
- Go over the checklist table below for further check.

	Check Items					
	Power LED	**Screen display**	**Heatsink and fan**	**BIOS beeps**	**Error messages**	**Reference page**
No power	Off	No	Stop	No	N/A	3-4
No screen display	On	No	Stop	No	N/A	3-5
	On	No	Running	No	N/A	3-5
	On	No	Running	Yes	N//A	3-5
Failure to enter OS	On	Yes	Running	Yes	Yes	3-5
	On	Yes	Running	No	Yes	3-5
	On	Yes	Running	No	No	3-5

If the problem has been fixed but a new problem emerges, go over the checklist again. If the problem persists, contact your retailer or ASUS technical support team for further help.

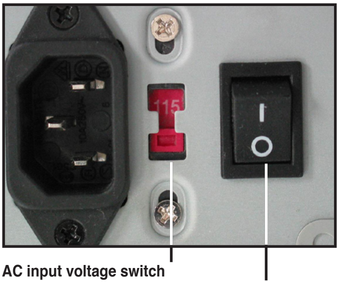
3.2.1 No power

ASUS motherboards come with a standby power LED. The LED lights up to indicate that the system is ON. If the LED stays unlit, follow the instructions below to fix the problem.

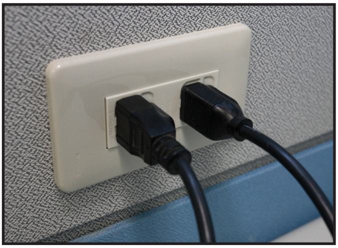


1. Ensure to adjust your power supply to the correct AC input voltage in your area, and the power supply is turned on.

- Before adjusting the AC input voltage, ensure to disconnect the power plug. Failure to do so will seriously damage the power supply unit.
- Failure to adjust the power supply to the correct AC input voltage will seriously damage the system.



2. Ensure you have attached the power cord to the wall outlet.
   - Connect the power plug directly to the wall outlet. DO NOT connect it to the power extension, uninterruptible power supply (UPS) or other devices.
   - Exchange the power plugs of the system and the monitor to check whether the wall outlet is working normally.



3. If the problem persists, you may need to contact your retailer for a new power supply unit. If the power supply unit functions, contact your ASUS motherboard retailer for motherboard warranty service.

3.2.2 Failure to boot-up; No screen display

Most boot-up failure and no screen display result from device defection or incorrect installation. Follow the instructions below to fix the problem.

1. Ensure that all the power cables are attached, including the system and the monitor.
2. Ensure if the problem comes from expansion devices.
    - Remove all the expansion card and devices. Use only motherboard, monitor, VGA card, memory modules, power supply unit, heatsink and fan, keyboard, and mouse to reboot the system.
    - If the system is working normally, it is one of the expansion devices that causes the problem. Reinstall the expansion devices you removed back to the system one by one and find out the defective device.
3. Ensure if the problem comes from the basic system devices.
    - If you have some spare devices, you can replace the devices in turn to find out the defective device in the order of “memory module, CPU, motherboard, hard/optical disk drive, keyboard/mouse.”

When you find out the defective device, contact your device retailer for service.

3.2.3 Failure to enter the operating system

1. If the problem emerges after you add a hardware, remove the newly added hardware and reboot the system. If the system is working normally without the hardware, the device may be defective or incompatible with the system. Contact the device retailer for help.
2. If the problem emerges after you install a software or driver, follow the instructions below to fix the problem.
    a. Enter the operating system in safe mode and remove the software or driver.
    b. Contact the operating system company for further support.
    c. If the previous instructions fail to fix the problem, you may need to reformat your hard disk drive and reinstall a new operating system.
3. If the problem emerges after you change the BIOS settings, reboot and enter the BIOS to load the setup defaults. Refer the motherboard user guide for details.
4. If the problem comes from a computer virus or a corrupt file, follow the instructions below to fix the problem.

a. Enter the operating system in safe mode and do a full system virus scan using an anti-virus application.

b. Contact the operating system company for further support.

c. If the previous instructions fail to fix the problem, you may need to reformat your hard disk drive and reinstall a new operating system.

3.2.4 FAQs

Q1: The memory reported in POST is different from the memory installed.

A1: The reported difference in memory may result from defective memory modules or incorrect DIMM installation. Ensure the DIMMs are in good condition and the DIMMs are installed correctly. Refer to the motherboard user guide for details. If you install 4.0 GB memory and it reports 3.X GB, it is normal.

Q2. The system cannot detect the floppy disk drive, but the floopy disk stays lit.

A2: The floopy disk cables are not properly installed. Ensure the red stripe on the cable (pin1 end) should match pin1 on the floppy disk drive.

Q3: Fail to enter the operating system after the USB flash disk or external hard disk drives.

A3: When the system detects USB flash disk or USB interface hard disks, it may change the booting device priority. Remove the USB devices and restart the system.

Q4: When installing Windows XP, it fails to locate the hard disk drives installed to the RAID controller.

A4: Windows XP does not include the RAID controller driver so the hard disk drives are not detected. Copy the RAID controller driver to a floppy disk and when booting the system with the Windows XP disk, press <F6> to read the driver from the floppy disk. Refer to the motherboard user guide for details.

Chapter 4: Computer care tips

4.1 Proper care of your PC

Your personal computer is like other home appliances. Keep your computer away from humidity, direct sun, and static electricity source. You should not move the computer when it is turned on in case of damage. Internal dust will affect the operating disk drive and contribute to overheating problem which will cause computer crash or damage the components.

4.2 Basic knowledge

1. Encase your computer with dust cover when not in use.
2. When using your computer, do not put anything on the monitor to block the ventilation holes. Excessive heat will cause the monitor malfunction.
3. Do not place the computer close to the wall and leave some space for heat dissipation. Overheating will cause the system crash.
4. Place the computer on a stable surface.
5. Keep the computer away from areas of extreme temperature. 5°C to 30°C is the best surroundings temperature. Use an air conditioner or a electric fan to gain a better heat dissipation.
6. Arrange the ribbon cables neatly to avoid insufficient airflow.

4.3 Usage knowledge

1. Turn on and shut down your computer regularly. If your computer needs to be on for a long time, use a better system/CPU fan and high voltage power supply unit.
2. A sudden power failure will damage the hard disk drive. When the power supply is unstable, add an uninterruptible power supply to your computer is recommended.
3. Rearrange the data files, do the virus scanning and virus codes renewal and defragment disk regularly.
4. Clean your computer regularly. (Unplugged all the power cords before cleaning)
    - Uninstall the motherboad and hard/optical disk drives, then clean them with canned air or a soft brush.
    - Remove the dust and hair debris on the power supply unit with an anti-static vacuum.

4.4 Tips

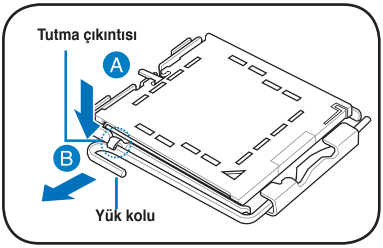
1. If your computer will not be used for a long time, put some desiccant moisture absorbers in the chassis to prevent humidity damage.
2. In some hot and humid climatic areas, you had better turn on your computer every other week. Doing so also helps prevent humidity damage.

Bölüm 1: Hızlı Çalıştırma

1.1 CPU Montajı

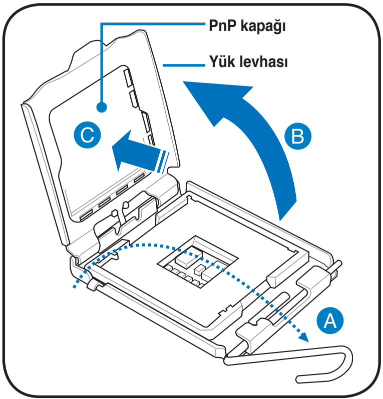
1.1.1 Intel® LGA775 Soket

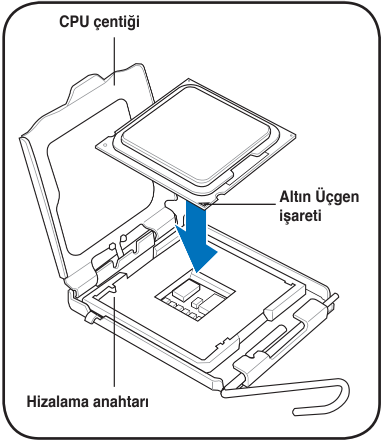
1. Anakart üzerinde CPU soketini tespit edin.
2. Yük koluna başparmağınızla bastırın (A), ardından tutma çıkıntısından serbest kalana kadar sola (B) hareket ettirin.


Tutma çıkıntısı
A
B
Yük kolu

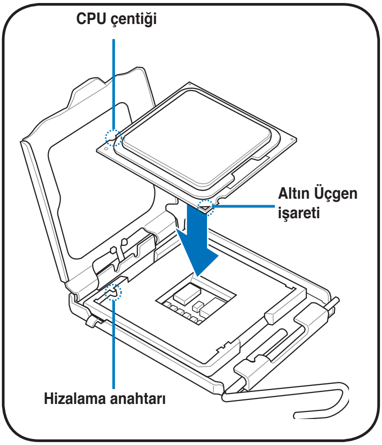
Yuva pimlerinin zarar görmesini önlemek için, bir CPU takana kadar PnP kapağını çıkarmayın.

3. Yük kolunu ok yönünde 135º açıyla kaldırın.
4. Yük levhasını başparmağınız ve işaret parmağınızla 100º açıyla kaldırın (4A), ardından PnP kepini yük plaka penceresinden iterek çıkarın (4B).


PnP kapağı
Yük levhası
C
B
A

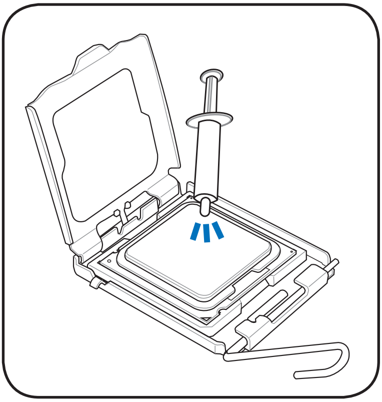

CPU çentiği
Altın Üçgen işareti
Hizalama anahtarı

5. CPU'yu yuvanın üzerine altın üçgen yuvanın sol alt köşesine gelşecek şekilde yerleştirin ve yuva hizalama anahtarını CPU çentiğine takın.



CPU yalnızca tek bir doğru yönde yerleşir. CPU yalnızca bir doğru yönde takılır. Yuvadaki konektörlerin kıvrılmasını ve CPU'nun zarar görmesini önlemek için CPU'yu yuvaya zorla TAKMAYIN!!

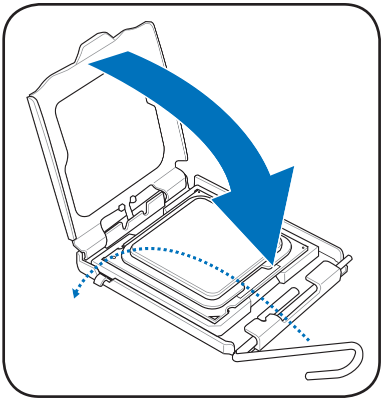
6. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

7. Yük levhasını kapatın (A), ardından yük kolunu (B) tutma çıkıntısına oturana kadar ittirin.

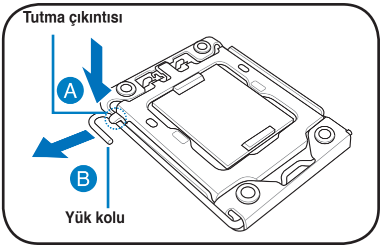


1.1.2 Intel® LGA1366 Yuvası

1. Ana karttaki CPU yuvasını bulun.

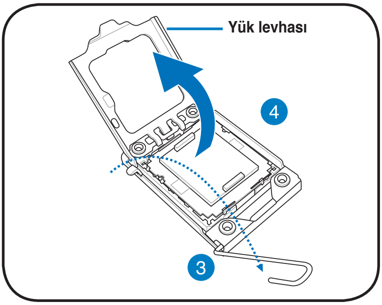
2. Yük koluna başparmağınızla bastırın (A), ardından tutma çıkıntısından serbest kalana kadar sola (B) hareket ettirin.

Yuva pimlerinin zarar görmesini önlemek için, bir CPU takana kadar PnP kapağını çıkarmayın.

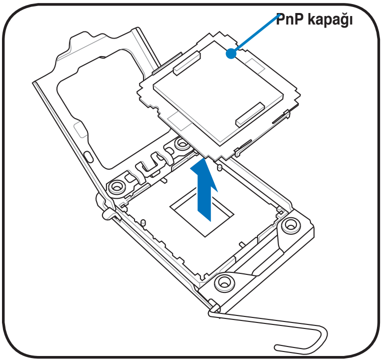

Tutma çıkıntısı
A
B
Yük kolu

3. Yük kolunu ok yönünde 135º açıyla kaldırın.

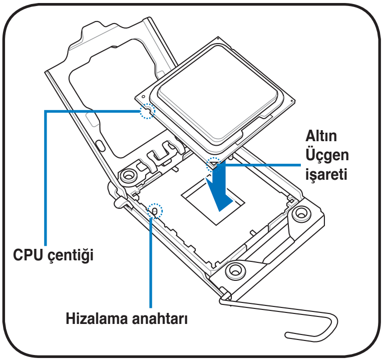
4. Yük levhasını başparmağınız ve işaret parmağınızla 100º açıyla kaldırın.


Yük levhası
4
3

5. PnP kapağını CPU yuvasından çıkarın.

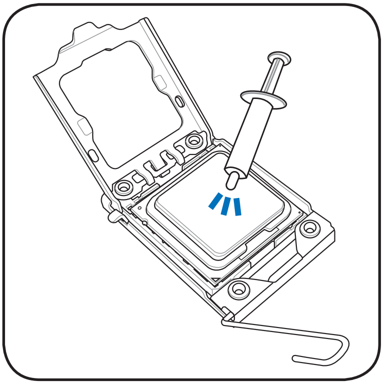


6. CPU'yu yuvanın üzerine altın üçgen yuvanın sol alt köşesine gelşecek şekilde yerleştirin ve yuva hizalama anahtarını CPU çentiğine takın.



CPU yalnızca tek bir doğru yönde yerleşir. CPU yalnızca bir doğru yönde takılır. Yuvadaki konektörlerin kıvrılmasını ve CPU'nun zarar görmesini önlemek için CPU'yu yuvaya zorla TAKMAYIN!!

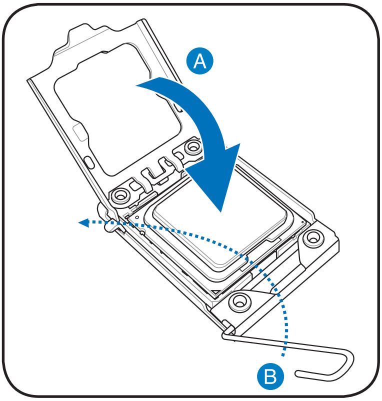
7. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

8. Yük levhasını kapatın (A), ardından yük kolunu (B) tutma çıkıntısına oturana kadar ittirin.



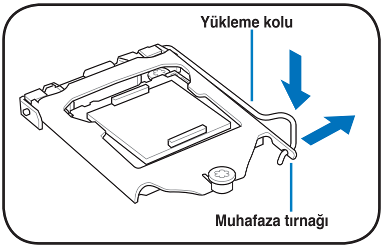
1.1.3 Intel® LGA1156 Soketi

LGA1155 CPU, LGA1156 soketi ile uyumlu değildir. LGA1156 soketine bir LGA1155 CPU KURMAYIN.

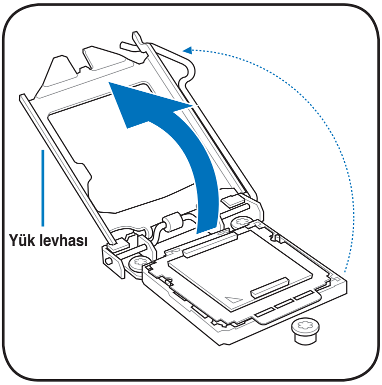
1. Anakarttaki CPU soketini bulun.

2. Lütfen başparmağınızla (A) yük koluna basın ve daha sonra muhafaza tırnağından serbest bırakılana kadar sağa(B) hareket ettirin.

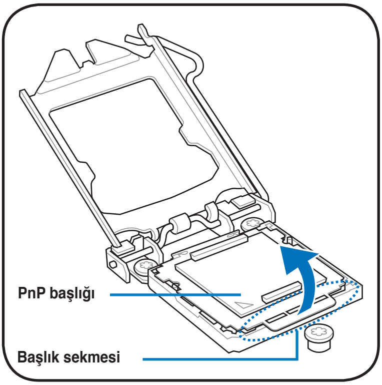
Soket pinlerinin hasar görmesini önlemek için, bir CPU takmadıkça PnP başlığını çıkarmayın.


Yükleme kolu
Muhafaza tırnağı

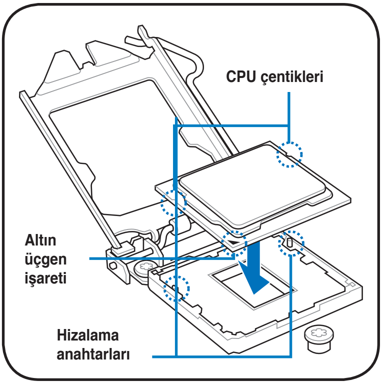
3. Yük kolunu, yük plakası tamamen kalkana kadar ok yönünde kaldırın.


Yük levhası

4. Sadece sekmeyi kaldırarak PnP kepini CPU soketinden çıkarın.

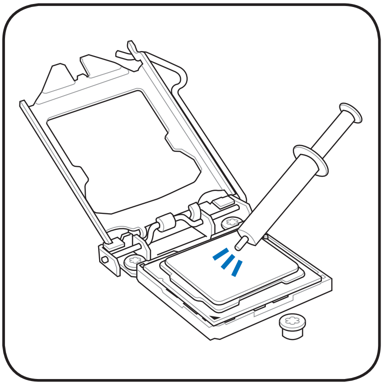

PnP başlığı
Başlık sekmesi

5. CPU'yu soketin üzerine yerleştirin, altın üçgenin soketin sol alt köşesinde olduğundan-emin olun ve ardından soket hizalama anahtarlarını CPU çentiklerine sabitleyin.



CPU yalnızca tek bir doğru yönde yerleşir. Soketteki konnektörlerin bükülmesini ve CPU'nun hasar görmesini önlemek için CPU'yu sokete zorla takmaya ÇALIŞMAYIN!

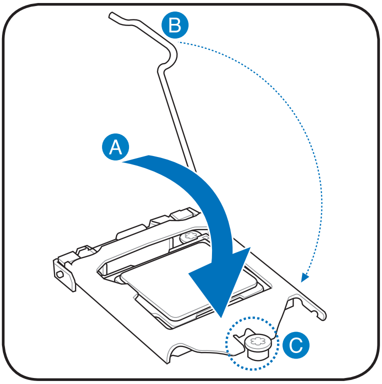
6. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



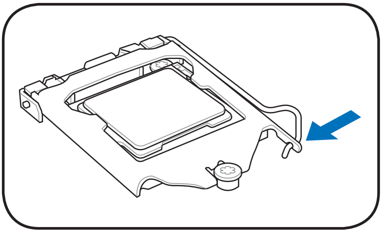
Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

7. Yük levhasının ön kenarının muhafaza kilidinin (C) altına kaydığından emin olarak yük levhasını (A) kapatın ve daha sonra yük kolunu (B) indirin.



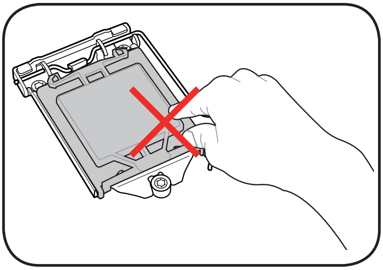
8. Yük kolunu muhafaza tırnağı altına takın.



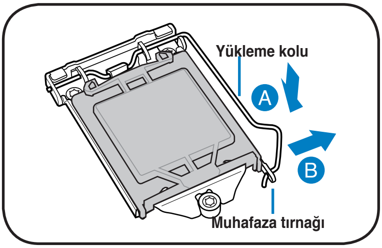
1.1.4 Intel® LGA1155 Soketi (Yükleme plakasındaki PnP kapağı)

LGA1156 CPU, LGA1155 soketi ile uyumlu değildir. LGA1155 soketine bir LGA1156 CPU KURMAYIN.

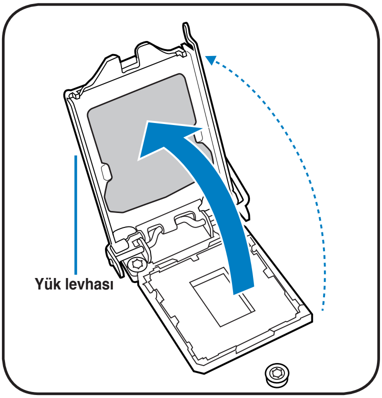
1. Anakarttaki CPU soketini bulun.
2. CPU'yu kurmadan önce, CPU soketinden PnP kapağını çıkarmadığınızdan emin olun.



3. Lütfen başparmağınızla (A) yük koluna basın ve daha sonra muhafaza tırnağından serbest bırakılana kadar sağa(B) hareket ettirin.

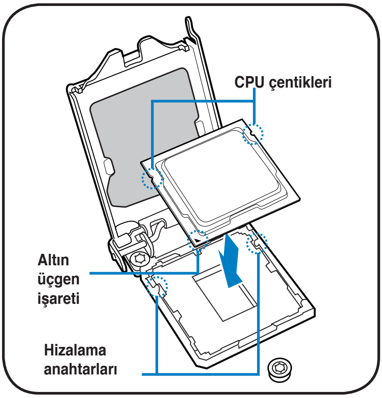


4. Yük kolunu, yük plakası tamamen kalkana kadar ok yönünde kaldırın.

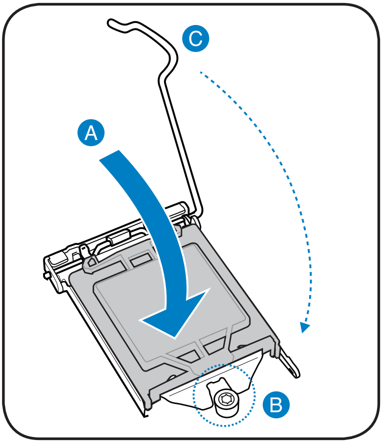


5. **CPU'yu soketin üzerine yerleştirin,** altın üçgenin soketin sol alt köşesinde olduğundan-**emin olun ve ardından soket** hizalama anahtarlarını CPU çentiklerine sabitleyin.

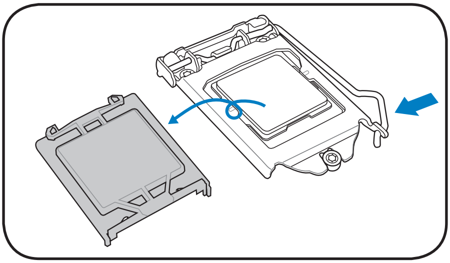
CPU yalnızca tek bir doğru yönde yerleşir. Soketteki konnektörlerin bükülmesini ve CPU'nun hasar görmesini önlemek için CPU'yu sokete zorla takmaya ÇALIŞMAYIN!


CPU çentikleri
Altın üçgen işareti
Hizalama anahtarları

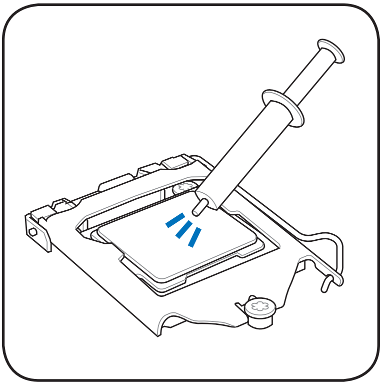
6. Yükleme plakasının ön yüzünün saklama kilidinin altına kaymasını sağlayarak (B), yükleme plakasını (A) kapatın. Sonra yükleme kolunu aşağıya itin (C).



7. PnP kapağını CPU soketinden çıkarmak için, saklama sekmesinin altına yükleme kolunu takın.



8. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

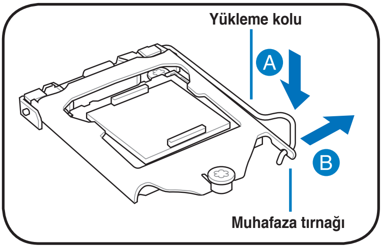
1.1.5 Intel® LGA1155 Soketi (Yükleme plakasının altındaki PnP kapağı)

LGA1156 CPU, LGA1155 soketi ile uyumlu değildir. LGA1155 soketine bir LGA1156 CPU KURMAYIN.

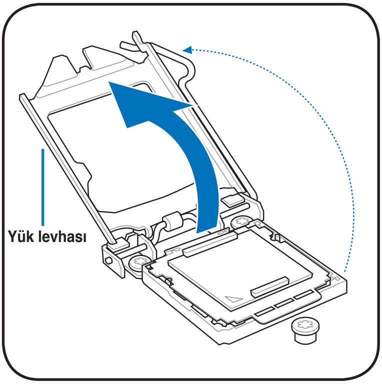
1. Anakarttaki CPU soketini bulun.

2. Lütfen başparmağınızla (A) yük koluna basın ve daha sonra muhafaza tırnağından serbest bırakılana kadar sağa(B) hareket ettirin.

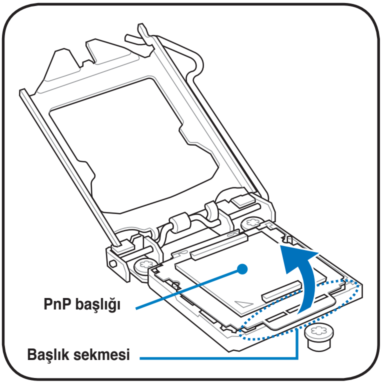
Soket pinlerinin hasar görmesini önlemek için, bir CPU takmadıkça PnP başlığını çıkarmayın.


Yükleme kolu
A
B
Muhafaza tırnağı

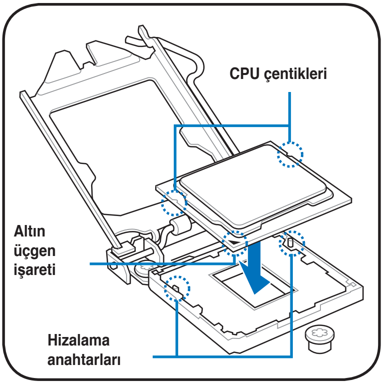
3. Yük kolunu, yük plakası tamamen kalkana kadar ok yönünde kaldırın.


Yük levhası

4. Sadece sekmeyi kaldırarak PnP kepini CPU soketinden çıkarın.

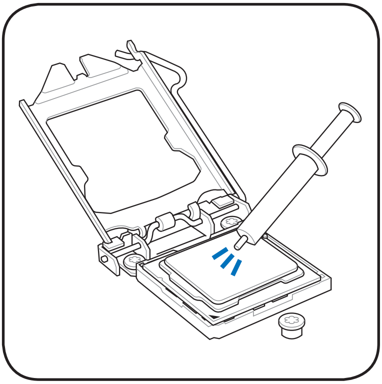

PnP başlığı
Başlık sekmesi

5. CPU'yu soketin üzerine yerleştirin, altın üçgenin soketin sol alt köşesinde olduğundan-emin olun ve ardından soket hizalama anahtarlarını CPU çentiklerine sabitleyin.



CPU yalnızca tek bir doğru yönde yerleşir. Soketteki konnektörlerin bükülmesini ve CPU'nun hasar görmesini önlemek için CPU'yu sokete zorla takmaya ÇALIŞMAYIN!

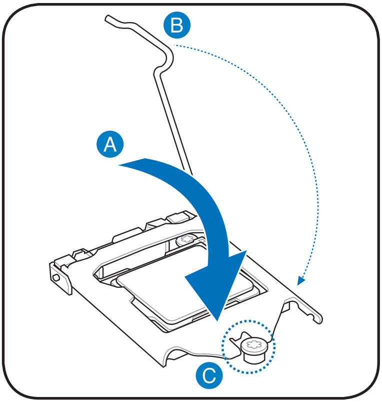
6. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



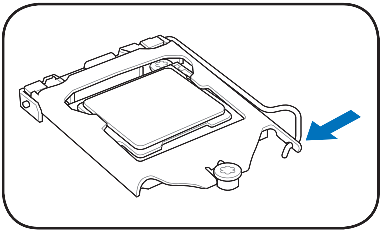
Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

7. Yük levhasının ön kenarının muhafaza kilidinin (C) altına kaydığından emin olarak yük levhasını (A) kapatın ve daha sonra yük kolunu (B) indirin.

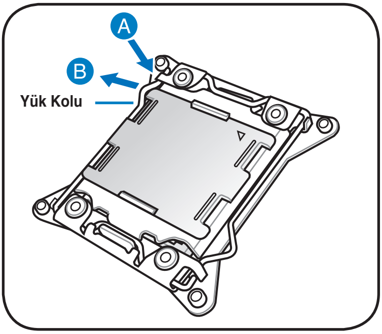


8. Yük kolunu muhafaza tırnağı altına takın.



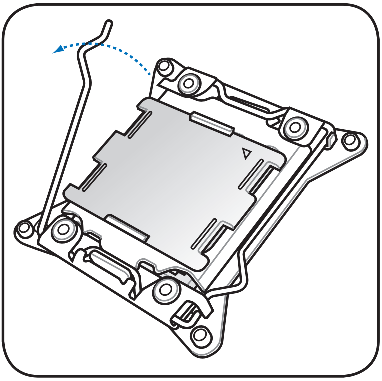
1.1.6 Intel® LGA2011 Soket

1. Anakarttaki CPU soketini bulun.
2. Lütfen başparmağınızla (A) yük koluna basın ve daha sonra muhafaza tırnağından serbest bırakılana kadar sağa(B) hareket ettirin.

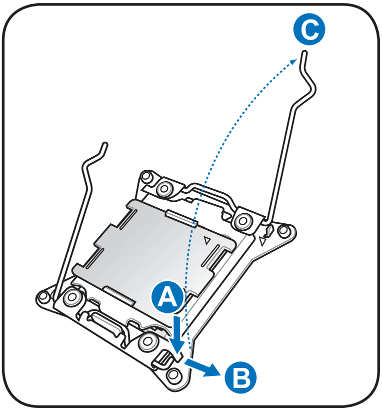


> Soket pinlerinin hasar görmesini önlemek için, bir CPU takmadıkça PnP başlığını çıkarmayın.

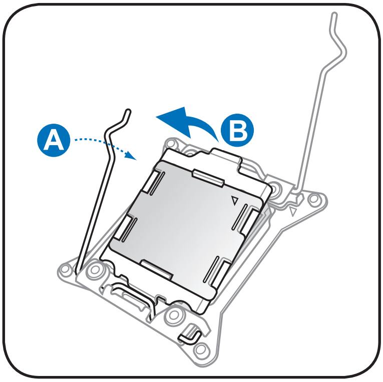
3. Yük kolunu ok yönünde hafifçe kaldırın.



4. Yük koluna başparmağınızla bastırın (A), ardından tutma çıkıntısından serbest kalana kadar sola (B) hareket ettirin. Yük kolunu ok yönünde hafifçe kaldırın.(C).

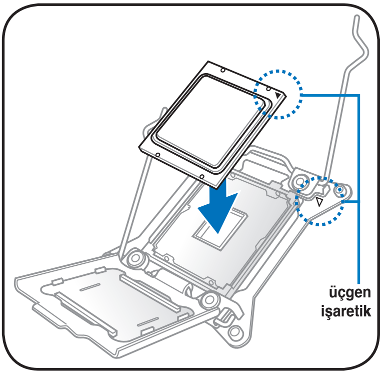


5. Yük plakasını (B) kaldırmak için sol yük kolunu (A) itin.

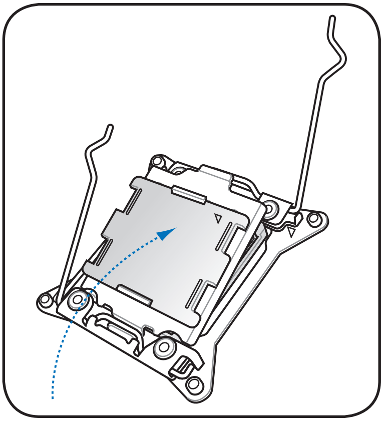


6. CPU'yu sokete yerleştirin, üçgen işaretinin soketin sağ üst köşesinde bulunduğundan emin olun.

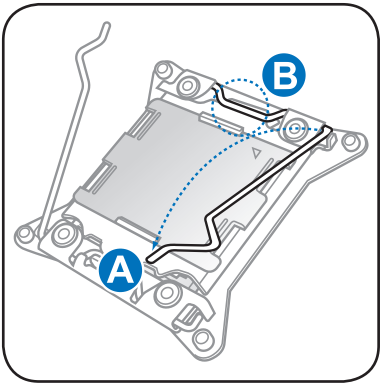
CPU yalnızca tek bir doğru yönde yerleşir. CPU yalnızca bir doğru yönde takılır. Yuvadaki konektörlerin kıvrılmasını ve CPU'nun zarar görmesini önlemek için CPU'yu yuvaya zorla TAKMAYIN!



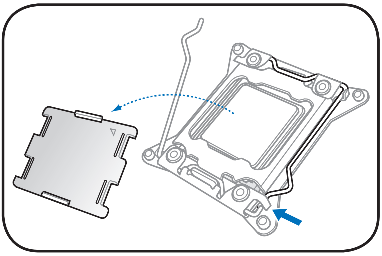
7. Yük tabak kapatın.



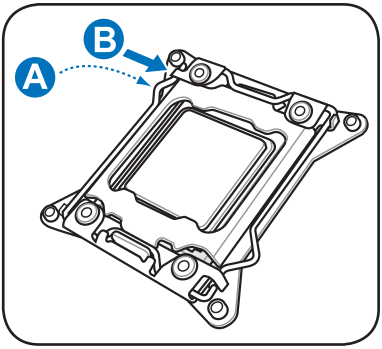
8. Sağ yük kolunu (A) aşağı iterek yük plakasının kenarının kol (B) ile sabitlendiğinden emin olun.



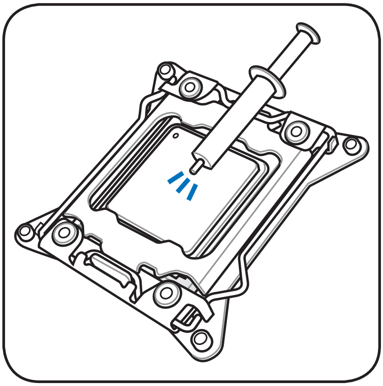
9. Sağ yük kolunu tutma kısmının altına yerleştirin. PnP kapağını CPU soketinden çıkarın.



10. Sol yük kolunu (A) aşağı bastırın ve ardından kolu tutma kısmının (B) altına yerleştirin.



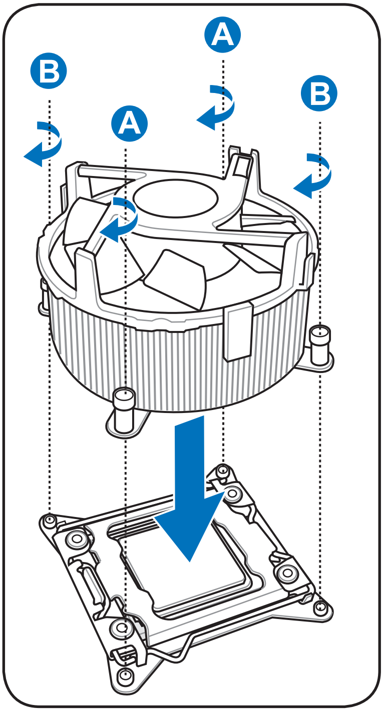
11. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



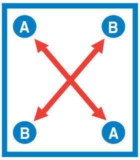
Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

12. Isı yutucuyu takılan CPU'nun en üstüne yerleştirin, dört bağlayıcının da CPU soketindeki delikler ile eşleştiğinden emin olun.
13. Isı yutucuyu CPU soketine takmak için yeterli olacak şekilde dört vidanın herbirini yıldız anahtar (Philips anahtarı) kullanarak çevirin. Dört vida da takıldığında, bunları birer birer sıkıştırarak ısı yutucuyu tamamen sabitleyin.



Dört ısı yutucu vidasını da çapraz sırada sıkıştırın.

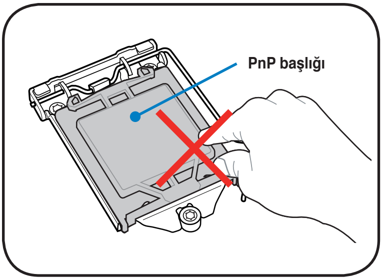


1.1.7 Intel® LGA1150 Soketi (Yükleme plakasındaki PnP kapağı)

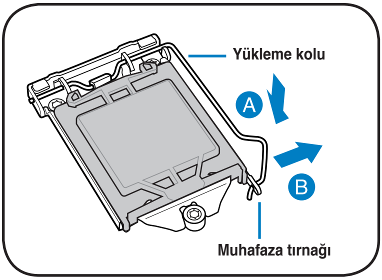
Sadece LGA1150 soketi için olan doğu CPU'yu taktığınızdan emin olunuz. LGA1150 soketindeki LGA1155 ve LGA1156 soketleri için tasarlanan bir CPU'yu TAKMAYIN.

1. Anakarttaki CPU soketini bulun.

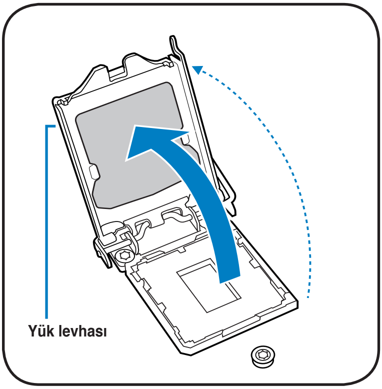
PnP kapağını CPU soketinden ÇIKARMAYIN. Aksi halde soketin pimleri bükülebilir. PnP kapağının yerini görmek için aşağıdaki çizime bakınız.



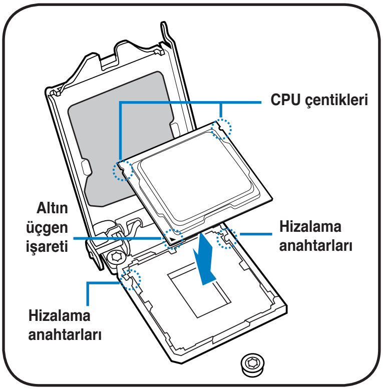
2. Lütfen başparmağınızla (A) yük koluna basın ve daha sonra muhafaza tırnağından serbest bırakılana kadar sağa(B) hareket ettirin.



3. Yük kolunu, yük plakası tamamen kalkana kadar ok yönünde kaldırın.

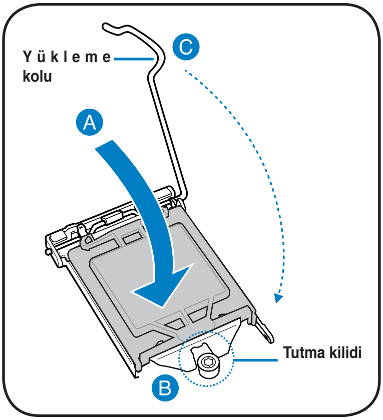


4. CPU'yu soketin üzerine yerleştirin, altın üçgenin soketin sol alt köşesinde olduğundan-emin olun ve ardından soket hizalama, ardından CPU girişlerini soketin hizalama tuşlarına geçirin.

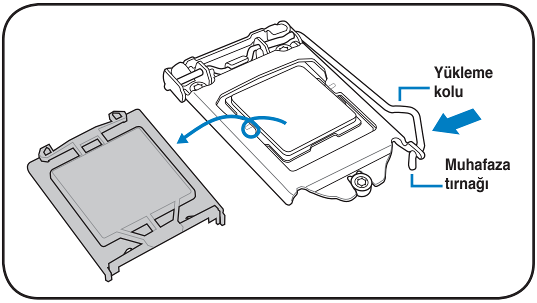

CPU çentikleri
Altın üçgen işareti
Hizalama anahtarları
Hizalama anahtarları

CPU yalnızca tek bir doğru yönde yerleşir. Soketteki konnektörlerin bükülmesini ve CPU'nun hasar görmesini önlemek için CPU'yu sokete zorla takmaya ÇALIŞMAYIN!.

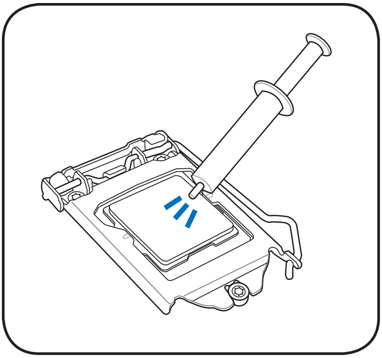
5. Yükleme plakasının ön yüzünün saklama kilidinin altına kaymasını sağlayarak (B), yükleme plakasını (A) kapatın. Sonra yükleme kolunu aşağıya itin (C).


Yükleme kolu
C
A
Tutma kilidi
B

6. PnP kapağını CPU soketinden çıkarmak için, saklama sekmesinin altına yükleme kolunu takın.


Yükleme kolu
Muhafaza tırnağı

7. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

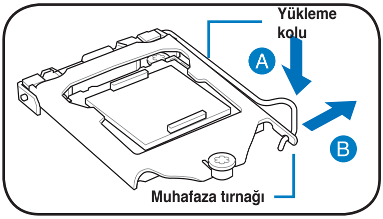
Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

1.1.8 Intel® LGA1150 Soketi (Yükleme plakasının altındaki PnP kapağı)

Sadece LGA1150 soketi için olan doğu CPU'yu taktığınızdan emin olunuz. LGA1150 soketindeki LGA1155 ve LGA1156 soketleri için tasarlanan bir CPU'yu TAKMAYIN.

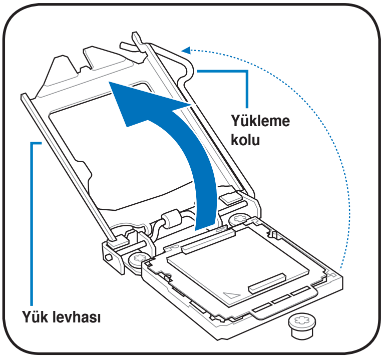
1. Locate the CPU socket on the motherboard.

2. Lütfen başparmağınızla (A) yük koluna basın ve daha sonra muhafaza tırnağından serbest bırakılana kadar sağa(B) hareket ettirin.

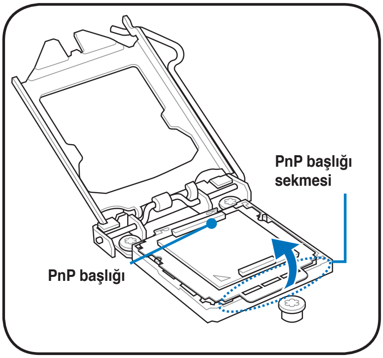

Yükleme kolu
A
B
Muhafaza tırnağı

PnP kapağını CPU soketinden ÇIKARMAYIN. Aksi halde soketin pimleri bükülebilir.

3. Yük kolunu, yük plakası tamamen kalkana kadar ok yönünde kaldırın.

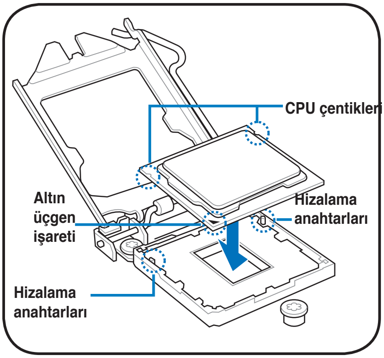

Yükleme kolu
Yük levhası

4. Sadece sekmeyi kaldırarak PnP kepini CPU soketinden çıkarın.


PnP başlığı sekmesi
PnP başlığı

5. CPU'yu soketin üzerine yerleştirin, altın üçgenin soketin sol alt köşesinde olduğundan-emin olun ve ardından soket hizalama anahtarlarını CPU çentiklerine sabitleyin.

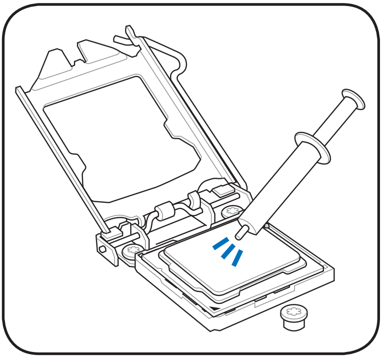
CPU yalnızca tek bir doğru yönde yerleşir. Soketteki konnektörlerin bükülmesini ve CPU'nun hasar görmesini önlemek için CPU'yu sokete zorla takmaya ÇALIŞMAYIN!


CPU çentikleri
Altın üçgen işareti
Hizalama anahtarları
Hizalama anahtarları

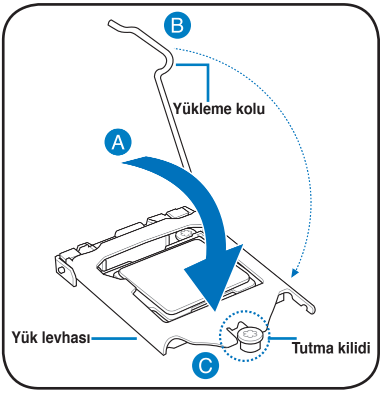
6. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.

Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

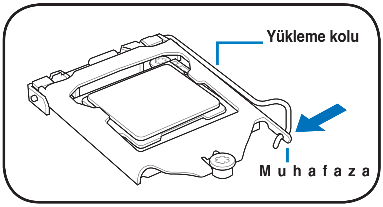
Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.



7. Yük levhasının ön kenarının muhafaza kilidinin (C) altına kaydığından emin olarak yük levhasını (A) kapatın ve daha sonra yük kolunu (B) indirin.


B
Yükleme kolu
A
Yük levhası
Tutma kilidi
C

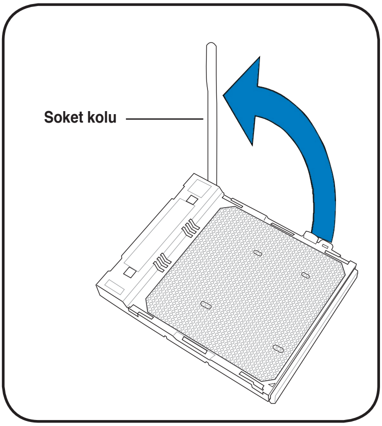
8. Yük kolunu muhafaza tırnağı altına takın.


Yükleme kolu
Muhafaza

1.1.9 AMD AM2 / AM2+ / AM3 Yuvası

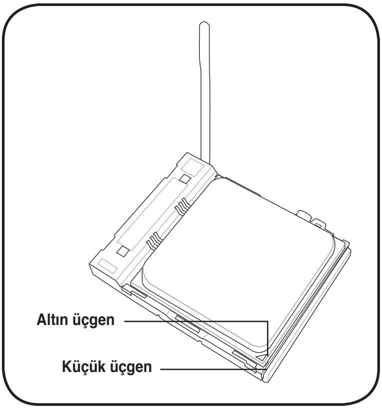
- AMD AM2 ve AM2+ soketleri AMD AM2, AM2+ ve AM3 işlemcileri ile uyumludur.
- AMD AM3 soketi AMD AM3 işlemcileri ile uyumludur. AM3 soketine bir AMD AM2+ / AM2 işlemcisi YÜKLEMEYİN. Sadece belirli AM3 anakart modelleri BIOS'u yükselterek AM3+ işlemcilerini destekler. Ayrıntılar için ASUS destek sitesine bakın.

1. Anakarttaki CPU yuvasını bulun.
2. Yuvanın kilidini açmak için kolu yana doğru bastırın, ardından 90º açıyla kaldırın.

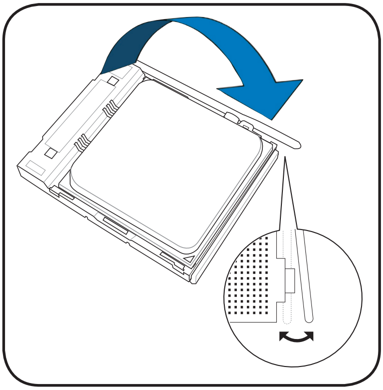


Yuva kolunun 90º açıyla yukarı kaldırıldığından emin olun. Aksi takdirde, CPU tam olarak oturmaz.

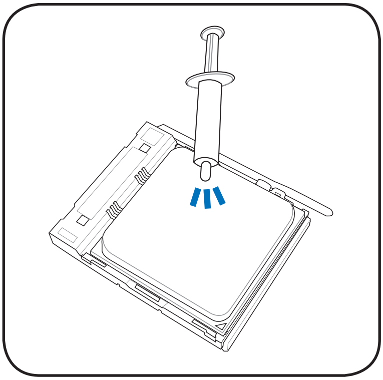
3. CPU'yu altın üçgenli CPU köşesi küçük üçgenli yuva köşesine denk gelecek şekilde yerleştirin.
4. CPU'yu yuvaya yerine oturana kadar dikkatli bir şekilde takın.



5. CPU yerindeyken, CPU'yu sabitlemek için yuva koluna bastırın. Kol, kilitlendiğini göstermek için yan çıkıntıya oturur.



6. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

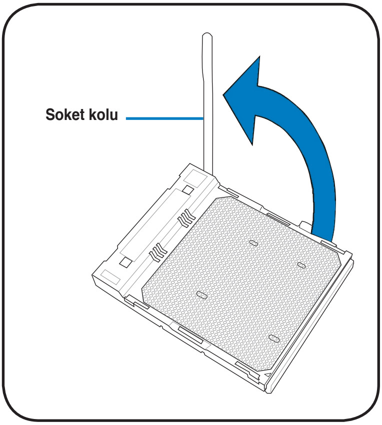
Türkçe

1.1.10 AMD AM3+ Yuvası

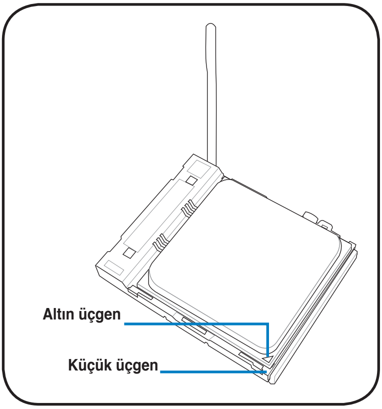
AMD AM3+ soketi AMD AM3+ ve AM3 işlemcileri ile uyumludur. Sadece bazı AM3 anakart modelleri BIOS'u yükselterek AM3+ işlemcilerini destekler. Ayrıntılar için ASUS destek sitesine bakın.

1. Anakarttaki CPU yuvasını bulun.
2. Yuvanın kilidini açmak için kolu yana doğru bastırın, ardından 90º açıyla kaldırın.

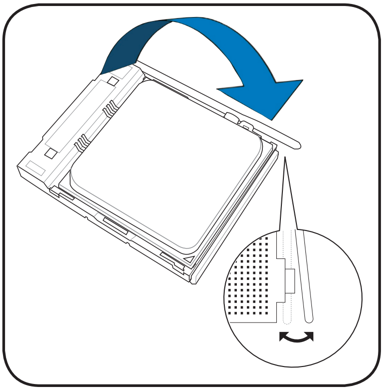
Yuva kolunun 90º açıyla yukarı kaldırıldığından emin olun. Aksi takdirde, CPU tam olarak oturmaz.



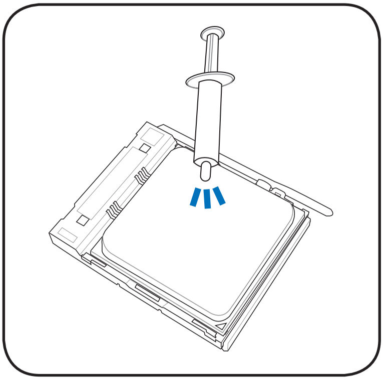
3. CPU'yu altın üçgenli CPU köşesi küçük üçgenli yuva köşesine denk gelecek şekilde yerleştirin.
4. CPU'yu yuvaya yerine oturana kadar dikkatli bir şekilde takın.



5. CPU yerindeyken, CPU'yu sabitlemek için yuva koluna bastırın. Kol, kilitlendiğini göstermek için yan çıkıntıya oturur.



6. Daha ince bir tabakaya yayılmadığından emin olarak, ısı yutucunun temas edeceği maruz kalma alanına bir miktar Termal Arabirim Malzemesi uygulayın.



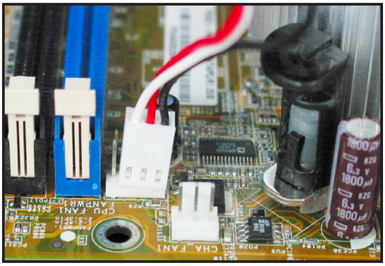
Bazı ısı yutucular ön işlemden geçmiş ısı macunu ile birlikte gelir. Öyleyse, bu adımı geçin.

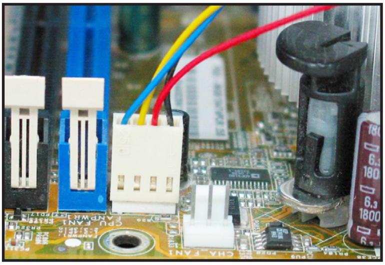
Termal Arabirim Malzemesi zehirlidir ve yenilmez. YEMEYİN. Gözünüz veya cildinizle temas ederse, hemen yıkayın ve derhal tıbbi yardım isteyin.

1.2 Isı emici ve fan montajı

CPU ısı emici ve fan montajı için:

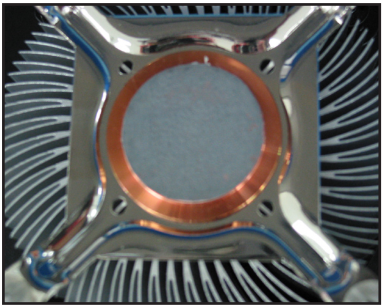
1. Anakartınıza bağlı olarak Intel ya da AMD sertifikalı bir ısı emici ve fan tertibatı seçin. 3 pinli (sol) ve 4 pinli (sağ) fan konektörü vardır. Sadece 4 pin konektörlü CPU fanları, ASUS Q-Fan teknolojisini desteklemektedir.





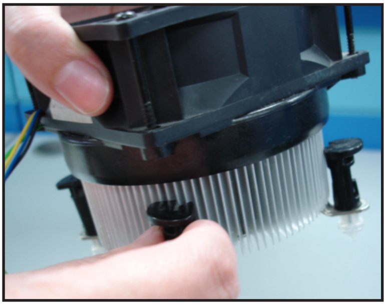
Intel sertifikalı ısı emici için:

2. Bazı ısı emiciler ön uygulamalı termal macunla birlikte gelir. Bu durumda macunu kazımayın ve koruyucu filmi sadece kurulum öncesinde çıkarın. Macun yoksa, ısı emici montajından önce CPU'nun ısı emici ile temas edeceği bölgeye bir kaç damla termal macun uygulayın. Macunun ince düzgün bir tabaka olarak sürüldüğünden emin olun.



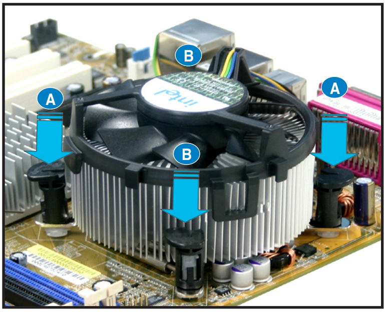
Macunun kirlenmesini önlemek için doğrudan doğruya parmağınızla SÜRMEYİN.

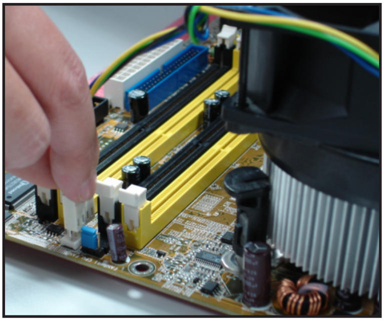
3. Her bir tutturucuyu dışa doğru yöneltilmiş olan kanalın dar ucu ile yönlendirin.



4. Isı emici ve fan tertibatını yerinde sabit tutmak için iki tutturucuyu çapraz sırayla aynı anda aşağıya bastırın.

5. CPU fan kablosunu anakart üzerinde bulunan ilgili konektöre bağlayın.

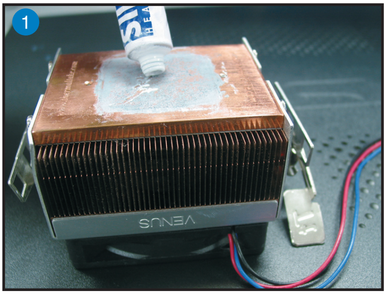


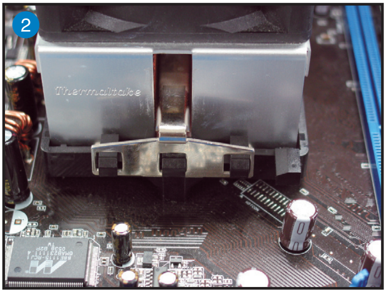


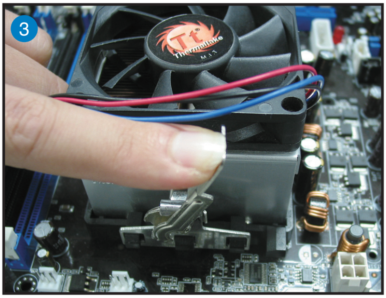
CPU fan konektörünü bağlamayı UNUTMAYIN! Bu konektörü takmazsanız donanım izleme hataları meydana gelebilir ve maksimum ısı dağılma alanı kazanmak için tüm yönlü bir ısı emici kullanmanızı öneririz.

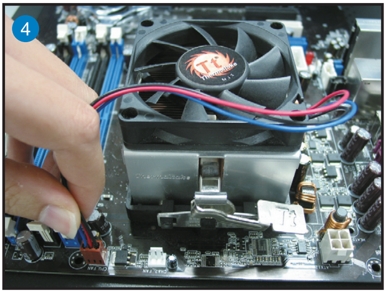
AMD sertifikalı ısı emici için:

AMD sertifikalı bir ısı emici monte etmek için aşağıdaki talimatları izleyin.







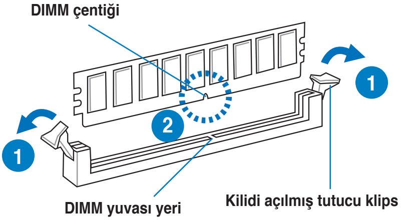


1.3 DIMM takma

DIMM veya diğer sistem bileşenlerini takmadan veya çıkarmadan önce güç kaynağını kapattığınızdan emin olun. Güç kaynağının kapatılmaması durumunda, anakart ve bileşenler ciddi derecede hasar görebilir.

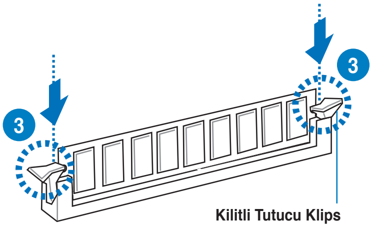
Çift klipsli bir DIMM soketine bir DIMM takma

1. DIMM soketinin kilidini tutucu klipsi dışa doğru bastırarak açın.
2. Bir DIMM'ı soket üzerinde hizalarken DIMM üzerindeki girintilerin DIMM yuvasındaki yer ile eşleşmesini sağlayın.



Bir DIMM bir çentiğe yalnızca tek bir yönde yerleşecek şekilde anahtarlanır. DIMM'e hasar gelmesini önlemek için DIMM'ı sokete yanlış yönde kuvvet uygulayarak SOKMAYIN.

3. DIMM'ı her iki ucundan tutun, ardından DIMM'ı dikey olarak sokete sokun. DIMM'ın her iki ucuna da tutucu klipsler yerine oturuncaya kadar aynı anda kuvvet uygulayın ve DIMM'ın doğru oturduğundan emin olmak için DIMM daha fazla ileri gidememelidir.

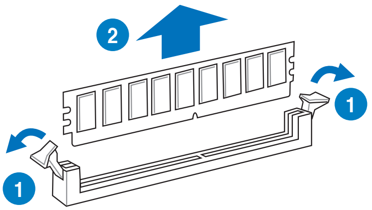


DIMM ucunun hasar görmesini önlemek için DIMM'ı daima sokete DİKEY olarak yerleştirin.

- İki ya da daha fazla DIMM takmak için, anakart paketiyle birlikte verilen kullanım kılavuzuna bakın.
- Bellek modüllerinin yetkili satıcı listesi için kullanım kılavuzuna bakın.

DIMM'ı çift klipsli DIMM soketinden çıkarma

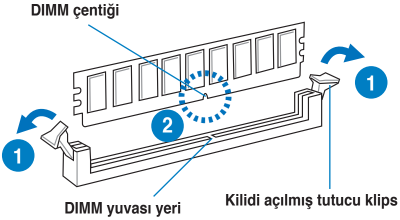
1. DIMM'ın kilidini açmak için tutucu klipslere dışarı doğru aynı anda basın.
2. DIMM'ı soketten çıkarın.



Tutucu klipslere basarken DIMM'ı parmaklarınız ile hafifçe destekleyin. Ekstra kuvvet uygulanarak dışarı çıktığında DIMM hasar görebilir.

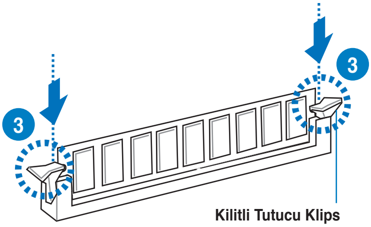
Çift klipsli bir DIMM soketine bir DIMM takma

1. DIMM soketinin kilidini tutucu klipsi dışa doğru bastırarak açın.
2. Bir DIMM'ı soket üzerinde hizalarken DIMM üzerindeki girintilerin DIMM yuvasındaki yer ile eşleşmesini sağlayın.



Bir DIMM bir çentiğe yalnızca tek bir yönde yerleşecek şekilde anahtarlanır. DIMM'e hasar gelmesini önlemek için DIMM'ı sokete yanlış yönde kuvvet uygulayarak SOKMAYIN.

3. DIMM'ı her iki ucundan tutun, ardından DIMM'ı dikey olarak sokete sokun. DIMM'ın her iki ucuna da tutucu klipsler yerine oturuncaya kadar aynı anda kuvvet uygulayın ve DIMM'ın doğru oturduğundan emin olmak için DIMM daha fazla ileri gidememelidir.

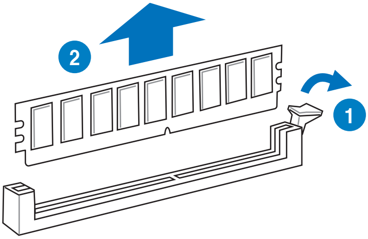


DIMM ucunun hasar görmesini önlemek için DIMM'ı daima sokete DİKEY olarak yerleştirin.

- İki ya da daha fazla DIMM takmak için, anakart paketiyle birlikte verilen kullanım kılavuzuna bakın.
- Bellek modüllerinin yetkili satıcı listesi için kullanım kılavuzuna bakın.

DIMM'ı tek klipsli DIMM soketinden çıkarma

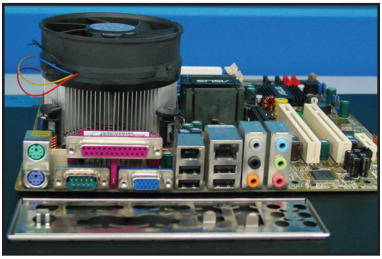
1. DIMM'ın kilidini açmak için tutucu klipsi dışarı doğru basın.
2. DIMM'ı soketten çıkarın.



Tutucu klipslere basarken DIMM'ı parmaklarınız ile hafifçe destekleyin. Ekstra kuvvet uygulanarak dışarı çıktığında DIMM hasar görebilir.

1.4 Anakart montajı

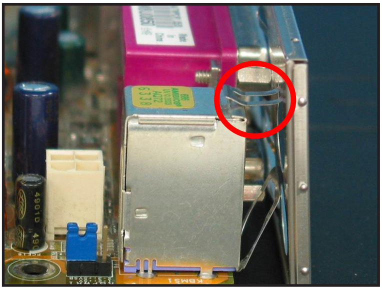
1. I/O (Giriş/Çıkış) portları anakartlarla farklılık gösterir. Sadece anakart paketi ile birlikte gelen arka I/O kalkanı kullanın ve monte edin.



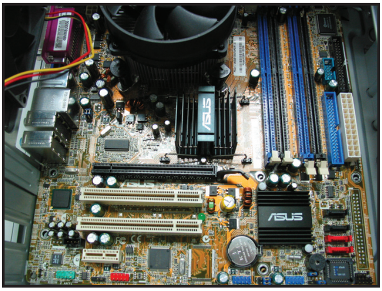
Bazı keskin kenar ve uçlar fiziksel yaralanmalara neden olabilir. Anakart ve I/O kalkanı montajından önce kesilmeye ya da delinmeye dirençli eldiven takmanızı öneririz.

2. Ara parçaları metal plaka üzerinde karşılık gelen vida deliklerine monte edin.

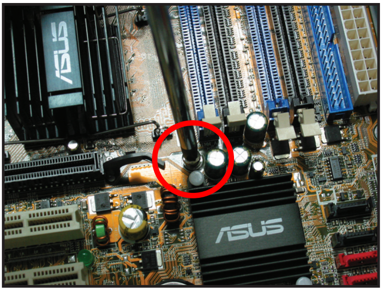
3. I/O siper kenar yayları I/O porta zarar verebilir. I/O siper montajında dikkatli olun.



4. Anakartın I/O tarafını kasanın arkasına doğru konumlandırın ve anakartı kasaya yerleştirin.



5. Önce vidaları çapraz sırayla dizin ve gevşek bir şekilde sıkın. Tüm vidalar yerleştirildikten sonra vidaları el sıkılığında sıkın.



- Anakart montajından önce kasanın arkasındaki genişletme kartı metal yuva kapaklarını çıkarabilirsiniz. Bazı kasa modellerinde genişletme yuvası kapağını montajdan sonra çıkarmak zor olabilir.
- Vidaları aşırı SIKMAYIN. Aksi halde anakart zarar görebilir.

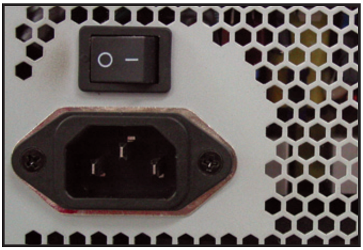
1.5 Güç kaynağı ünitesi montajı

Yaygın olarak kullanılan iki tür güç kaynağı ünitesi vardır. Bu türlerden biri aktif Güç Faktörü Düzelticili (Power Factor Correction, PFC) olup diğeri pasif PFC'lidir.

1. Bir güç kaynağı ünitesi seçin.

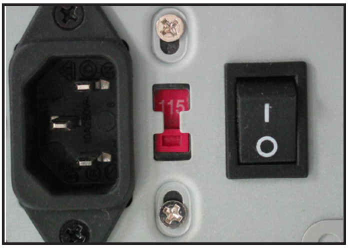
Aktif PFC'li güç kaynağı:

Aktif PFC, AC giriş voltajını otomatik olarak düzeltir.

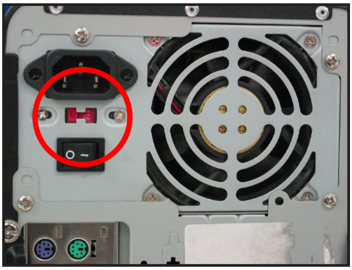


Pasif PFC'li güç kaynağı:

Pasif PFC, kullanıcının AC giriş voltajını elle ayarlamasını ister.



2. Pasif PFC'li bir güç kaynağı kullanıyorsanız, bölgenizdeki doğru AC giriş voltajına göre ayar yapın.



Güç kaynağının doğru AC giriş voltajına ayarlanmaması sisteme ciddi bir şekilde zarar verir.

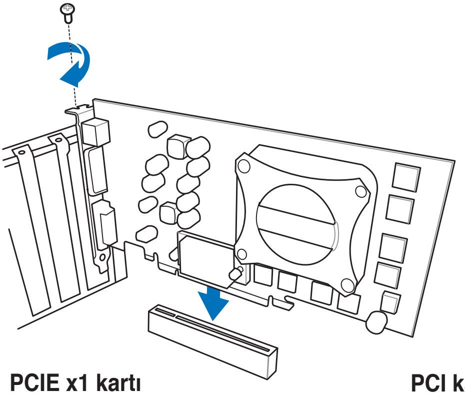
Sadece güvenlik sertifikalı güç kaynağı ünitelerini kullanın. Kararsız güç kaynağı üniteleri anakartınıza ve diğer bileşenlere zarar verebilirler. Anakart gereksinimlerini karşılayan güç kaynağı ünitelerinin kullanıcı kılavuzuna müracaat edin.

1.6 Genişletme kartı montajı

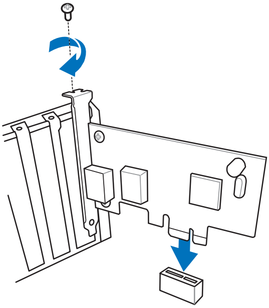
Genişletme kartı montajı için:

1. Genişletme kartı takmak istediğiniz genişletme kartı yuvasının karşısındaki metal yuva kapağını çıkarın.
2. Genişletme kartını takın ve bunun kart yuvasına düzgün bir şekilde oturduğundan emin olun.
3. Kartı yuvaya sağlamlaştırmak için vidalayın.
4. Başka bir genişletme kartı monte etmek için önceki adımları tekrarlayın.

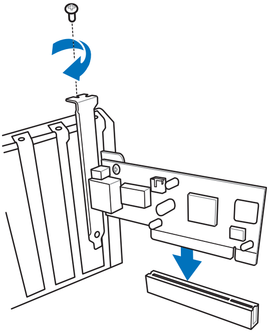
PCIE x16 kartı



PCIE x1 kartı



PCI kartı



- Kart yapılandırma detayları için kart dokümantasyonuna, genişletme kartı montajından sonra herhangi bir jumper ayarına ihtiyacınız olma durumunda anakart kullanıcı kılavuzuna müracaat edin.
- Genişletme kartı sinyal kablosu bağlantısı ile ilgili talimatlar için anakart kullanıcı kılavuzuna müracaat edin.

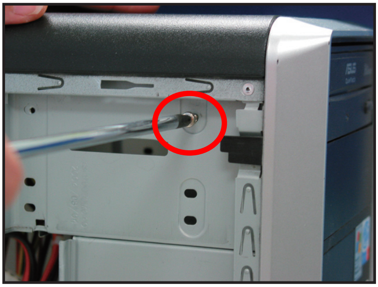
1.7 Disk sürücülerinin montajı

1.7.1 PATA optik disk sürücüsü

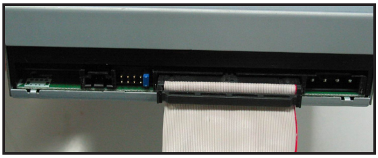
1. Yapay kapağı çıkarın ve optik disk sürücüsünü bölmeye kaydırın.

DVD
ROM
/ISUS
QuieTrack
16Xmax

2. Vida deliklerini hizalayın ve disk sürücüsünü vidalarla sağlamlaştırın.

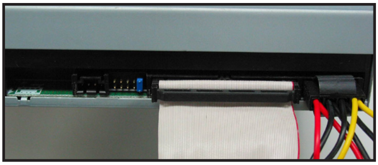


3. IDE kabloyu optik sürücüye takın. IDE kablo üzerindeki kırmızı şerit, pin1 ucudur ve optik sürücüdeki çukur, pin1 işaretine karşılık gelmelidir.

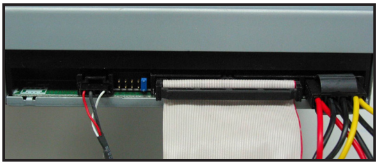


IDE kabloları yanlış kullanıma karşı korumalıdır. IDE kabloyu asla konektör içine zorlamayın.

4. 4 pinli güç kablosunu optik sürücüye bağlayın.

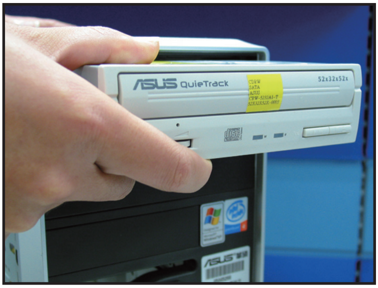


5. Ses kablosunu optik sürücüdeki konektöre bağlayın.

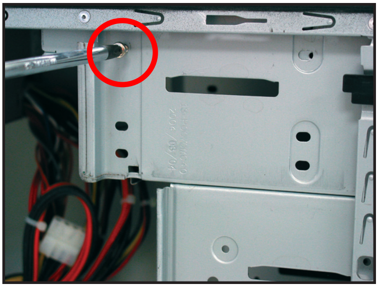


1.7.2 SATA optik disk sürücüsü

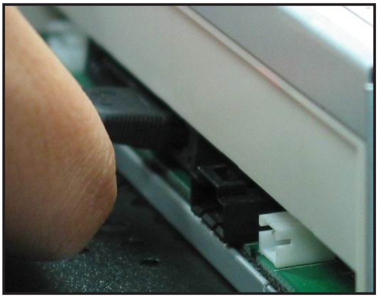
1. Yapay kapağı çıkarın ve optik disk sürücüsünü bölmeye kaydırın.



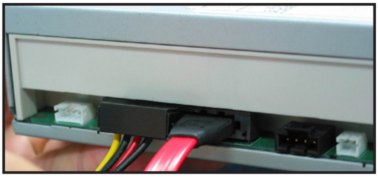
2. Vida deliklerini hizalayın ve disk sürücüsünü vidalarla sağlamlaştırın.



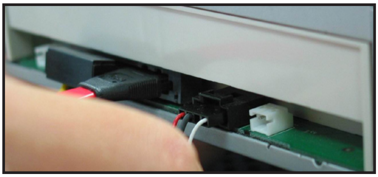
3. SATA kabloyu optik sürücüye takın. SATA kabloları yanlış kullanıma karşı korumalıdır. SATA kabloyu asla konnektör içine zorlamayın.



4. SATA güç kablosunu optik sürücüye bağlayın.

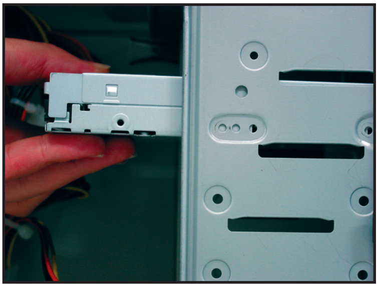


5. Ses kablosunu optik sürücüdeki konnektöre bağlayın.

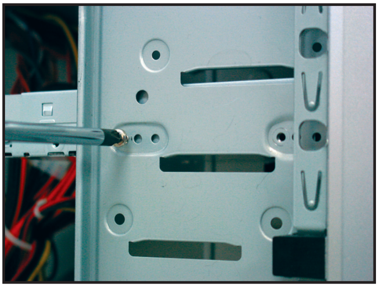


1.7.3 Disket sürücü

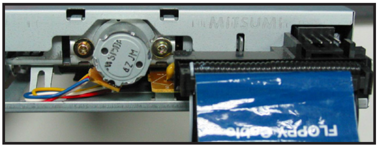
1. Yapay kapağı çıkarın ve disket sürücüyü bölmeye yerleştirin.



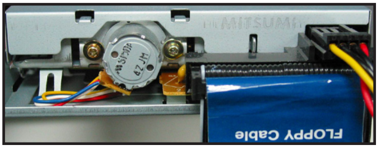
2. Vida deliklerini hizalayın ve disk sürücüyü vidalarla sağlamlaştırın.



3. Disket arayüz kablosunu disket sürücüye takın. Kablo üzerindeki kırmızı şerit pin1 ucudur ve disket sürücüdeki çukur pin1 işaretine karşılık gelmelidir.

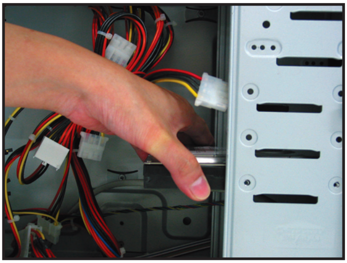


4. Disket güç kablosunu disket sürücünün arkasındaki konnektöre bağlayın.

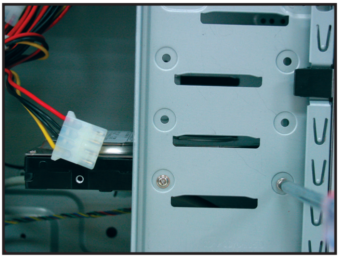


1.7.4 PATA sabit disk sürücü

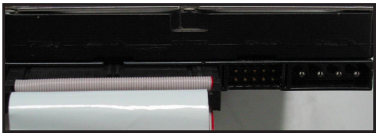
1. PATA sabit disk sürücüyü bölmeye yerleştirin.



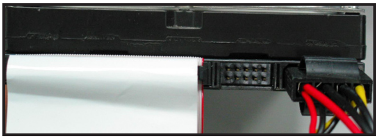
2. Vida deliklerini hizalayın ve disk sürücüyü vidalarla sağlamlaştırın.



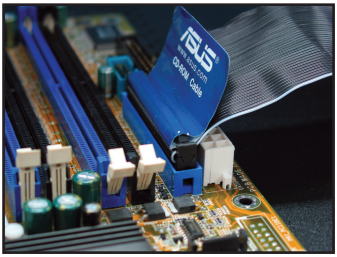
3. Sinyal kablosunu sabit disk sürücüye bağlayın. Kablo üzerindeki kırmızı şerit pin1 ucudur. Yanlış kullanıma karşı koruma çentiğini eşleştirin ve kabloyu konnektör içine zorla sokmaya çalışmayın.



4. 4 pinli güç kablosunu sabit disk sürücünün arkasındaki konnektöre bağlayın.

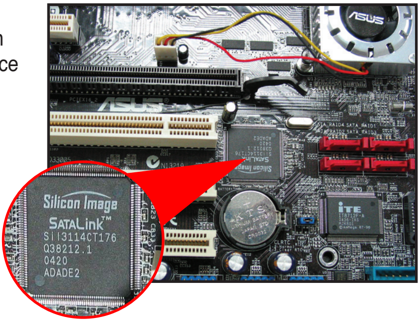


5. Sinyal kablosunun diğer ucunu anakart üzerindeki ilgili yuvaya bağlayın.



PATA sabit disk sürücü montajı ile ilgili notlar

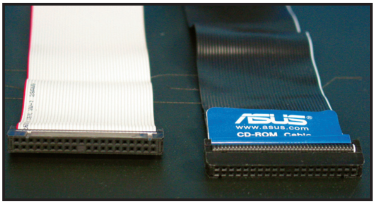
- İşletim sisteminiz RAID ya da diğer denetleyiciler tarafından denetlenen sabit disk sürücüye kurulmuşsa, önce sabit diske denetleyici sürücüsünü yüklemeniz gerekir.


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

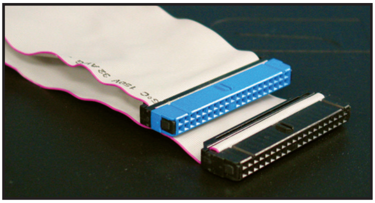
- Kablolar çekme uçlu olarak tasarlanmıştır. Disk sürücüleri sadece kablo etiketlerine göre kolay bir şekilde monte edin. Pinlere hasar gelmesini önlemek için kablo bağlantısını kablo uçlarını çekerek kesin.

www.asus.com
FLOPPY Cable
www.asus.com
CD-ROM Cable

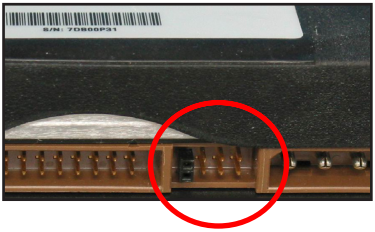
- ATA IDE disk sürücüler için iki kablo mevcuttur, yeni 80-telli (sağ) ve eski 40-telli (sol) kablolar. ATA66/100/133 disk sürücüler için sadece 80-telli kablo daha iyi performans sunabilir. 40-telli kablolar genellikle optik sürücüler içindir.


www.asus.com
CD-ROM Cable

- Kablo konnektörü renk kodludur. Mavi olan ana konnektördür, siyah/gri olan ise birincil/ikincil disk sürücü içindir.

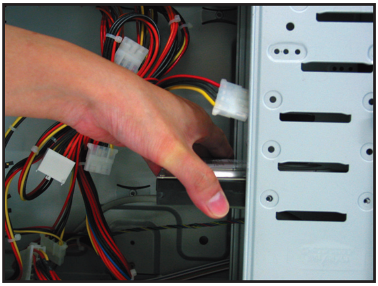


- İki adet IDE cihazı bağlarken, biri master (ana) ve diğeri slave (bağımlı) olacak şekilde jumper'ları farklı konuma getirmeniz gerekir. 80-telli kablo kullanıyorsanız kablo seçme stilini kullanabilirsiniz.

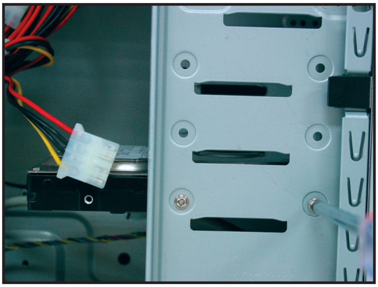

S/N: 7DB00P31

1.7.5 SATA sabit disk sürücü

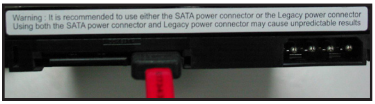
1. SATA sabit disk sürücüyü bölmeye yerleştirin.



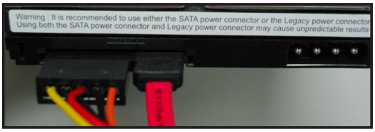
2. Vida deliklerini hizalayın ve disk sürücüyü vidalarla sağlamlaştırın.



3. SATA kablosunu sabit disk sürücüye bağlayın. Kablo sadece tek yönde oturabilir.

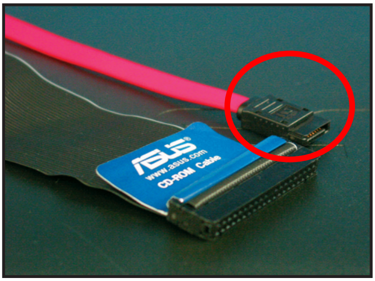

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

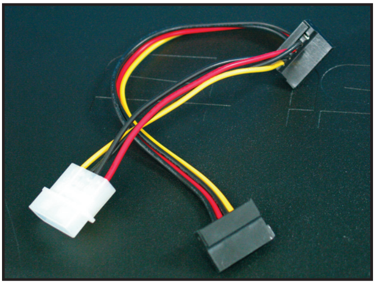
4. SATA güç kablosunu sabit disk sürücünün arkasındaki konnektöre bağlayın.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

SATA sabit disk sürücü montajı ile ilgili notlar

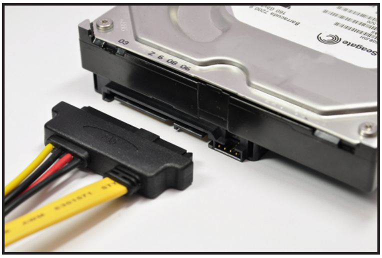
- Seri ATA (SATA) arayüzü yüksek veri iletim hızı ve daha iyi voltaj toleransına sahiptir. SATA kablosunun dar tasarımı ayrıca kablolama ile ilgili meselelere çözüm bulur ve kasa içinde daha iyi hava akışı olanağı sunar.
- SATA güç kablosu konnektörü geleneksel 4 pinli güç konnektöründen farklıdır. Güç kaynağı ünitenizin bu yeni konnektörü içermemesi durumunda ASUS anakartı ile birlikte güç adaptör kabloları verilir.


ASUS
www.asus.com
CD-ROM Cable

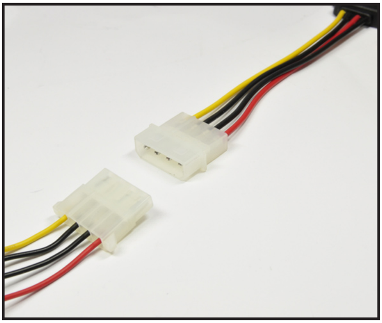


1.7.6 SAS sabit disk sürücü

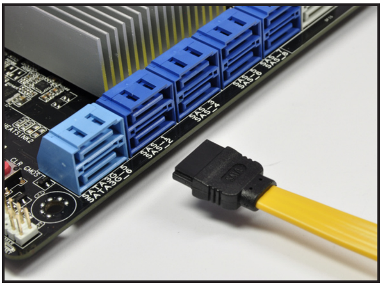
1. SAS sinyali / güç combo kablosunu sabit disk sürücüsüne doğru yönlendirin ve bağlayın. Kablo sadece tek yönde oturabilir.



2. SAS güç kablosunu güç kaynağı ünitesindeki güç konektörüne bağlayın.



3. SAS sinyal kablosunu ana karttaki SAS konektörüne bağlayın.

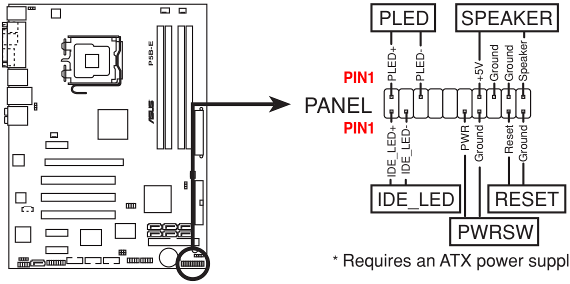


1.8 Ön panel kabloları

Ön panel kablolarını bağlamak için:

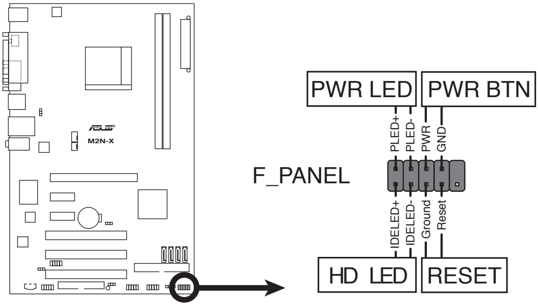
- RESET (Sıfırlama Anahtarı)
- PLED (Güç LED'i)
- PWRSW (Güç Anahtarı)
- IDE_LED (IDE Sabit Disk Aktif LED'i)
- SPEAKER (Hoparlör Konnektörü)

20-8 pinli ön panel konnektörü


P5B-E
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

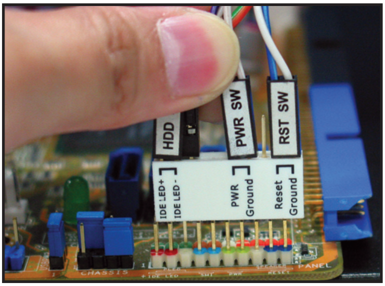
10-1 pinli ön panel konnektörü


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Kasanızın ön panel kabloları model ya da tasarımlarla farklılık gösterebilir. Bu konnektörleri etikete gore anakarta bağlayın.
- LED'ler yanmıyor ve pin konumu doğru ise toprak pinleri ile sinyal pinlerini yanlış konumlandırmış olabilirsiniz. Genellikle beyaz tel toprak pinlerini ve renkli tel sinyal pinlerini temsil eder.
- IDE_LED ve PLED kablolarının yönü varken SPEAKER, RESET ve PWRSW ön panel kablolarının herhangi bir özel yönü yoktur. Kablo PIN1'ini anakart üzerinde konnektör PIN1'e bağlayın.
- Ön panel konnektörü anakart modeli ile değişir, daha fazla bilgi için kullanıcı kılavuzuna başvurun.

ASUS Q-Konnektör

ASUS Q-Konnektörün tek adımlı kurulumu sayesinde karışık ön panel kabloları ile savaşmaktan kurtulur zaman kazanırsınız. Ayrıntılar için kullanıcı kılavuzuna müracaat edin.

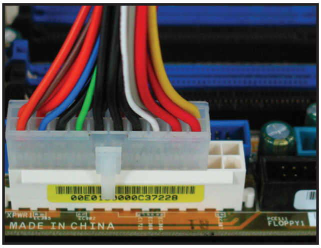


Q-konnektör seçili modellerde kullanılabilmektedir. Ayrıntılar için kullanıcı kılavuzuna müracaat edin.

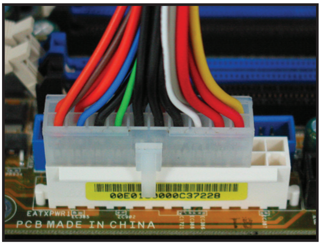
1.9 ATX gücünün bağlanması

ATX güç konnektörleri sadece tek yönde takılabilir. Yan klibi kullanarak konnektörleri anakarta takın. Erkek güç konnektörlerini anakart üzerindeki dişi karşılıklarına takmak için ZORLAMAYIN. Genellikle anakart üzerinde iki adet konnektör bulunur, 24 pinli ve 4 pinli güç konnektörleri. Bazı eski güç kaynağı ünitelerinde sadece anakarttaki 24 pinli güç konnektörüne de uyan 20 pinli güç konnektörü vardır.

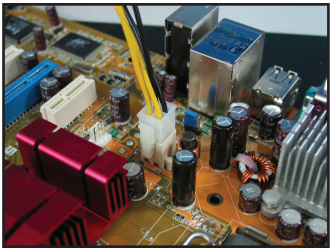
24 pinli güç konnektörü



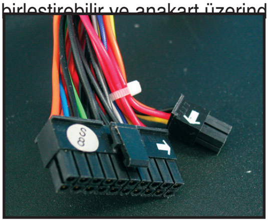
20 pinli güç konnektörü (24 pinli dişi karşılığında)

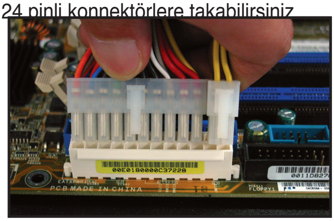


4 pinli güç konnektörü



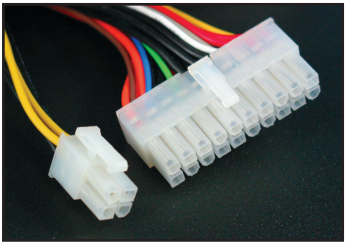
- Güç konnektörlerini anakarta takarken harici AC güç bağlantısını YAPMAYIN.
- Güç konnektörlerinin anakarta sıkı bir şekilde takıldığından emin olun.
- Güç kaynağınızın 20-pin+4-pin desteği varsa, bu iki konnektörü birleştirebilir ve anakart üzerindeki 24 pinli konnektörlere takabilirsiniz.



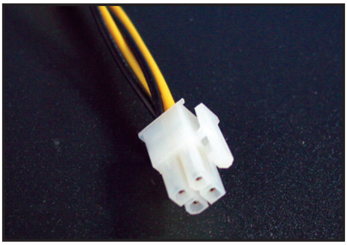


Güç konnektörleri

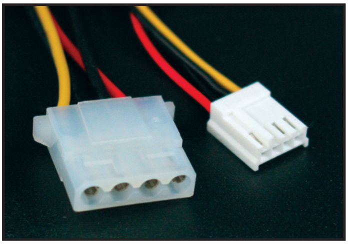
20+4 (24) pin ATX konnektör



4 pinli ATX konnektör

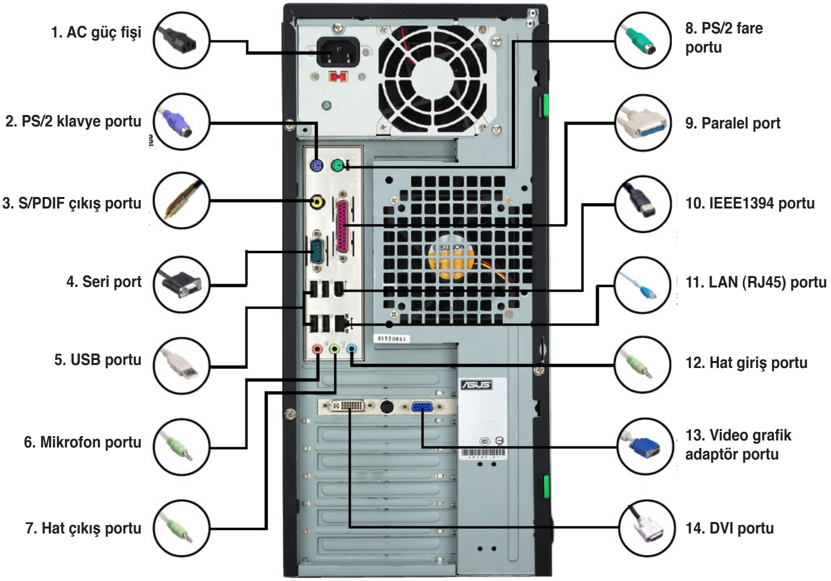


çevre birim güç konnektörü (sol)
disket güç konektörü (sağ)



1.10 Çevre birimleri ve aksesuarlar

Çevre birimlerin ve aksesuarların bağlantısı için aşağıdaki şekle başvurun.


1. AC güç fişi
2. PS/2 klavye portu
3. S/PDIF çıkış portu
4. Seri port
5. USB portu
6. Mikrofon portu
7. Hat çıkış portu
8. PS/2 fare portu
9. Paralel port
10. IEEE1394 portu
11. LAN (RJ45) portu
12. Hat giriş portu
13. Video grafik adaptör portu
14. DVI portu

1. AC Güç fişi + güç uzatma kablosu

2. PS/2 klavye portu + klavye

3. S/PDIF çıkış portu + dijital 5.1 hoparlör sistemi

4. Seri port + PDA yuvası

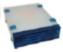
5. USB port + USB cihazlar

6. Mikrofon portu + mikrofon
7. Hat çıkış portu + hoparlör

8. PS/2 fare portu + fare

9. Paralel port + yazıcı

10. IEEE 1394 portu + harici sabit disk sürücü



11. AN (RJ45) portu + modem

12. Hat giriş portu + kayıt cihazı

13. VGA portu + CRT monitör
14. DVI portu + LCD monitör

Arka panel konnektörleri modellere göre değişiklik gösterir. Ayrıntılar için kullanıcı kılavuzuna müracaat edin.

1.11 İlk kez çalıştırma

Sistem açılışta otomatik sınama ya da POST'u çalıştırır. Testler yapılırken BIOS'tan bip sesi duyulur (Aşağıdaki bip kod tablosuna bakın)

BIOS Bip Sesi	Açıklama
Üç kısa bip sesinden sonra bir sürekli bip sesi	VGA algılanmadı
İki kısa bip sesinden sonra bir sürekli bip sesi ve daha sonra duraklama (tekrarlı)	Bellek algılanmadı
Dört kısa bip sesinden sonra bir sürekli bip sesi	Donanım bileşeni arızası (AMI BIOS)
Dört kısa bip sesi	Donanım bileşeni arızası (AWARD BIOS)

Sorun Giderme

Sorun	Eylem
• Bilgisayar açılmıyor. • Güç LED'i yanmıyor. • Güç kaynağı fanı çalışmıyor.	Güç kablosunun doğru olarak bağlandığından emin olun.
Bilgisayar açık fakat monitor ekranı siyah	• Monitör gücünün açık ve VGA kablosunun doğru olarak bağlandığından emin olun. • Monitör parlaklık ve kontrastını ayarlayın. • Bilgisayarı kapatın ve güç kablosunu çıkarın. VGA kartının sıkı bir şekilde takılı olduğunu kontrol edin.
Bellek algılanmadı	• Bellek modülünün doğru olduğundan emin olun. • DIMM bellek modüllerinin DIMM sokete sıkıca geçmiş olduğundan emin olun. • Bellek modülünün yetkili satıcı listesinden alındığından emin olun. QVL için kullanıcı kılavuzuna müracaat edin.
Disket Hatası (Gösterge sürekli yanıyor ya da ekrana bir uyarı mesajı geliyor.)	• Disket sürücü ile ilgili BIOS yapılandırmasını kontrol edin. • Disket sürücü kablolarının doğru olarak takıldığından emin olun.
Sabit/optik disk sürücü hatası (tanınmadı ya da algılanmadı)	• Jumper ayarının doğru olduğundan emin olun. (Master/ Slave) • Sabit/optik disk sürücü ile ilgili BIOS yapılandırmasını kontrol edin. • Cihaz kablolarının sıkıca bağlı olduğundan emin olun. • Cihaz sürücülerinin yüklü olduğundan emin olun.

Bölüm 2: BIOS Yönetme/güncelleme

2.1 AFUDOS programı

AFUDOS programı güncellenen BIOS dosyası ile başlatılabilir floppy diskini kullanarak DOS ortamın da BIOS dosyasını güncellemenize olanak sağlar. Bu program ayrıca güncelleme sürecinde BIOS arızalandığında veya bozulduğunda yedek olarak kullanabileceğiniz mevcut BIOS dosyasını kopyalamanıza olanak sağlar.

Mevcut BIOS'un Kopyalanması

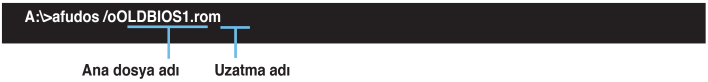
Mevcut BIOS dosyasını AFUDOS programını kullanarak kopyalamak için:

- Floppy diskin yazmaya karşı korumalı olmadığından ve dosyayı kaydetmek için en az 1024KB boş alan bulunduğundan emin olun.
- İleriki BIOS ekranları sadece referans olması içindir. Gerçek BIOS ekranı gösterilen ile aynı olmayabilir.

1. AFUDOS programını (afudos.exe) anakart destek CD'sinden daha önce oluşturduğunuz başlatılabilir floppy diske kopyalayın.
2. Sistemi DOS modunda başlatın, ardından şunu girin:

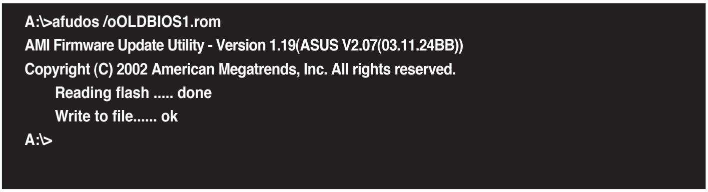
   afudos /o[dosya adı]

   burada [dosya adı] ana dosya adı için sekiz alfanümerik karakterden daha fazla olmayan ve kullanıcı tarafından atanan bir dosya adıdır ve uzantı adı üç alfanümerik karakterden oluşmaktadır.



```
A:\>afudos /oOLDBIOS1.rom
```

3. <Enter> tuşuna basın. Program mevcut BIOS dosyasını floppy diske kopyalar.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

Program mevcut BIOS dosyasını kopyaladıktan sonra DOS uyarısına döner.

BIOS dosyasının güncellenmesi

AFUDOS programını kullanarak BIOS dosyasını güncellemek için:

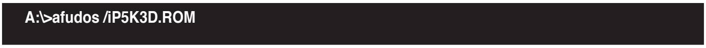
1. ASUS web sitesini (www.asus.com) ziyaret edin ve anakart için olan en yeni BIOS dosyasını indirin. BIOS dosyasını başlatılabilir floppy diske kaydedin.

BIOS dosya adını bir yere yazın. DOS uyarısına tam BIOS dosya adını yazmanız gerekecektir.

2. AFUDOS programını (afudos.exe) anakart destek CD'sinden önceden oluşturduğunuz başlatılabilir floppy diske kopyalayın.
3. Sistemi DOS modunda başlatın, ardından şunu girin:

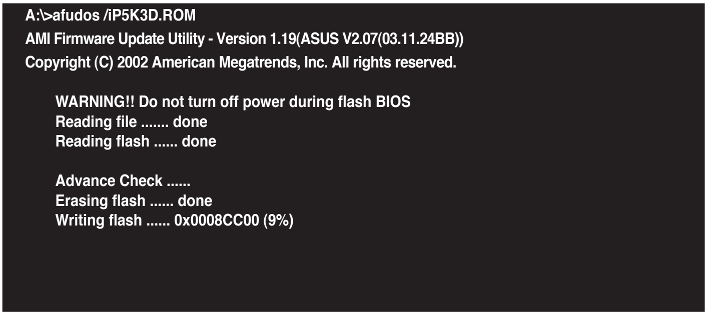
afudos /i[dosya adı]

burada [dosya adı] başlatılabilir floppy diskteki en yeni veya orijinal BIOS dosyasıdır.



```
A:\>afudos /iP5K3D.ROM
```

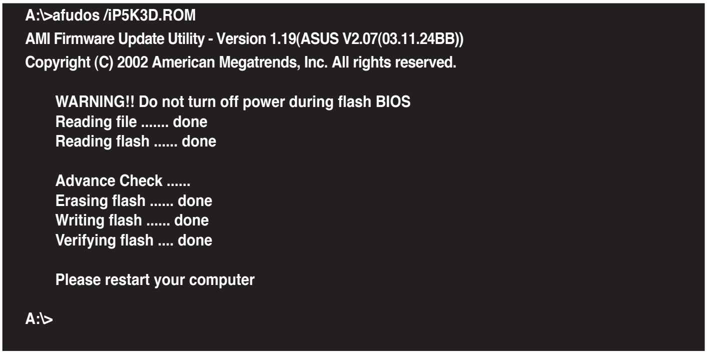
4. Program dosyayı doğrular ve BIOS'u güncellemeye başlar.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Sistem başlatma arızasını önlemek için BIOS'u güncellerken sistemi kapatmayın veya sıfırlamayın!

5. BIOS güncelleme süreci tamamlandıktan sonra program DOS uyarısına döner. Sistemi sabit disk sürücüsünden yeniden başlatın.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Award BIOS Flash Programı

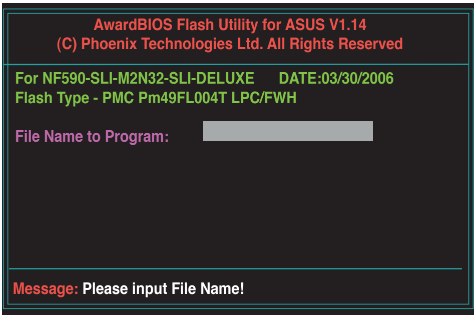
BIOS güncelleme

Temel Giriş/Çıkış Sistemi (BIOS) AwardBIOS Flash Programı kullanılarak güncellenebilir. Bu programı kullanarak BIOS'u güncellemek için bu talimatları yerine getirin.

1. ASUS web sitesinden en son BIOS dosyasını indirin. Dosyayı M2N32SLI.BIN olarak adlandırın ve bir diskete, CD ROM'a ya da **FAT 16/12 biçimindeki** USB flaş diske kaydedin.

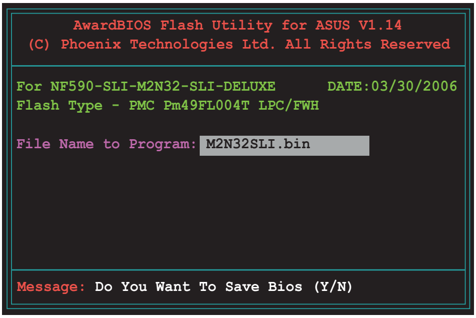
Yanlış BIOS dosyası yüklememek için sadece floppy diskteki güncellenen BIOS dosyasını kaydedin.

2. Destek CD'sinin Yazılım klasöründeki AwardBIOS Flash Programını floppy disk, CD ROM veya en son BIOS dosyası bulunan USB flash diskine kopyalayın.
3. Başlatılabilir floppy diski, CD ROM'u veya daha önceden oluşturduğunuz USB flash diskini kullanarak sistemi DOS modunda başlatın.
4. DOS modunda <X:> (X disk atamasının adını gösterir) kullanarak floppy diskin, CD ROM'un veya BIOS dosyasına kaydettiğiniz USB flash diskinin ve Award BIOS Flash Programının klasörüne geçin.
5. Uyarıda, awdflash girin ve ardından <Enter> tuşuna basın. Award BIOS Flash Programının ekranı belirir.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

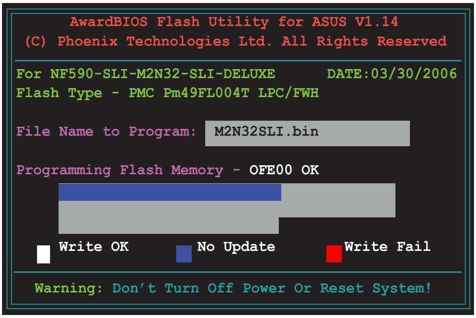
6. Dosya Adındaki BIOS dosya adını Program



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Program mevcut BIOS dosyasını kaydetmeniz için uyarı verdiğinde <N> tuşuna basın. Aşağıdaki ekran belirir.

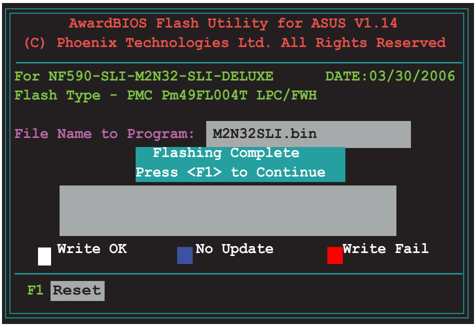
8. Program floppy diskteki, CD ROM'daki veya USB flash diskteki BIOS dosyasını doğrular ve BIOS dosyasını başlatır.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ⬜ Write OK       🟦 No Update        🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

Başlatma süresince sistemi kapatmayın veya sıfırlamayın!

9. Program Başlatma Tamamlandı mesajı göstererek BIOS dosyasını başarıyla başlattığınızı gösterir. Floppy diski çıkarın, ardından sistemi yeniden başlatmak için <F1> tuşuna basın.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                 Flashing Complete
               Press <F1> to Continue

 ⬜ Write OK       🟦 No Update        🟥 Write Fail

  F1 Reset
```

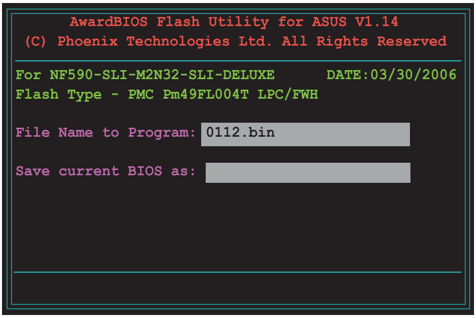
Mevcut BIOS dosyasının kaydedilmesi

Mevcut BIOS dosyasını kaydetmek için AwardBIOS Flash Programını kullanabilirsiniz. Başlatma sürecinde BIOS dosyası bozulursa mevcut BIOS dosyasını yükleyebilirsiniz.

Floppy diskin, CD ROM'un veya USB flash diskinin dosyayı kaydetmek için yeterli disk alanına sahip olduğundan emin olun.

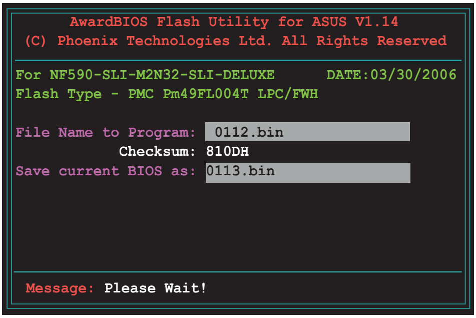
Mevcut BIOS dosyasını AwardBIOS Flash Programını kullanarak kaydetmek için:

1. Önceki ekrandaki 1. adımdan 6. adıma olan kısmı yerine getirin.
2. Program mevcut BIOS dosyasını kaydetmeniz için uyarı verirse <Y> tuşuna basın. Aşağıdaki ekran belirir.



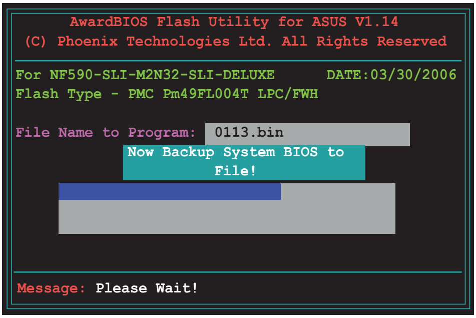
```
        AwardBIOS Flash Utility for ASUS V1.14
    (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:
```

3. Mevcut BIOS dosyasının dosya adını Mevcut BIOS'u Farklı Kaydet alanına girin, ardından <Enter> tuşuna basın.



```
        AwardBIOS Flash Utility for ASUS V1.14
    (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. Program mevcut BIOS dosyasını floppy diske kaydeder, ardından BIOS başlatma sürecine döner.



```
        AwardBIOS Flash Utility for ASUS V1.14
    (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
                 Now Backup System BIOS to
                           File!

Message: Please Wait!
```

2.3 ASUS Güncelleme programı

ASUS Güncellemesi, anakart BIOS'u Windows® ortamında yönetmenize, kaydetmenize ve güncellemenize olanak sağlayan bir programdır. ASUS Güncelle programı şunları yapmanıza olanak sağlar:

- Mevcut BIOS dosyasının kaydedilmesi
- En son BIOS dosyasının internetten indirilmesi
- BIOS'un güncellenen BIOS dosyadan güncellenmesi
- BIOS'un doğrudan internetten güncellenmesi ve
- BIOS sürüm bilgilerinin görüntülenmesi.

Bu program anakart paketi ile birlikte gönderilen destek CD'sinde vardır.

ASUS Güncellemesi bir ağ ya da İnternet Servis Sağlayıcısı (ISP) aracılığıyla bir internet bağlantısı gerektirir.

ASUS Güncellemesinin Kurulması

ASUS Güncellemesini kurmak için:

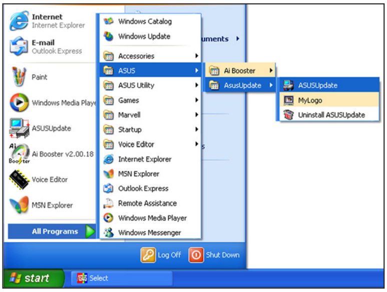
1. Destek CD'sini optik sürücüye yerleştirin. **Sürücüler** menüsü belirir.
2. **Main (Ana)** menüden, **programlar** sekmesine tıklayın, ardından **ASUS Güncellemesini Kur**'a tıklayın.
3. ASUS Güncelleme programı sisteminize kopyalanır.

BIOS'un internetten güncellenmesi

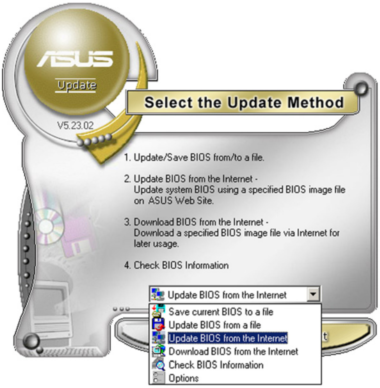
Bu programı kullanarak BIOS'u güncellemeden önce tüm Windows® uygulamalarından çıkın.

BIOS'u internetten güncellemek için:

1. **Başlat > Programlar > ASUS > ASUSUpdate > ASUSUpdate**'e tıklayarak Windows® masaüstünden ASUS Güncelleme programını başlatın. ASUS Güncellemesi ana penceresi belirir.

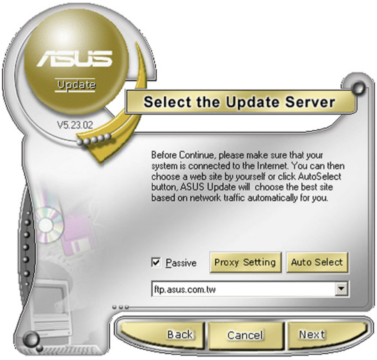

Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. İndirmeli menüden **Update BIOS from the Internet (BIOS'u İnternetten Güncelle)**'yi seçin ve ardından **Next (İleri)**'ye tıklayın.


ASUS
Update
V5.23.02
Select the Update Method
Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

3. Ağ trafiğinden kaçınmak için size en yakın ASUS FTP sitesini seçin veya **Oto Seç**'e tıklayın. **İleri**'ye tıklayın.

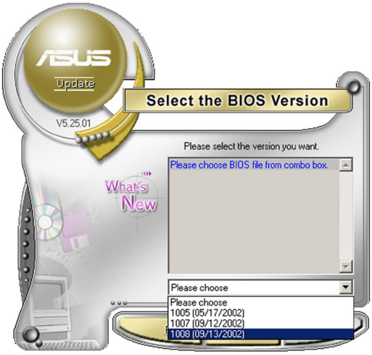

ASUS
Update
V5.23.02
Select the Update Server
Proxy Setting
Auto Select
Back
Cancel
Next

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

4. FTP sitesinden indirmek istediğiniz BIOS sürümünü seçin. **İleri**'ye tıklayın.


ASUS
Update
V5.25.01
Select the BIOS Version
What's New
Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

Please select the version you want.

Please choose BIOS file from combo box.

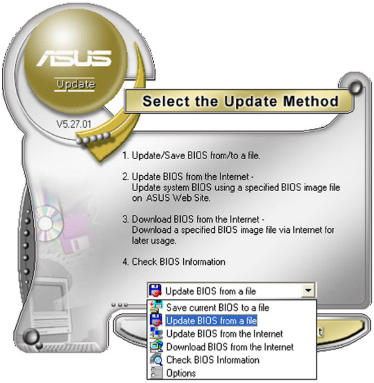
5. Güncelleme sürecini tamamlamak için ekranda verilen talimatları yerine getirin.

ASUS Güncelleme programı internetten kendini güncelleyebilmektedir. Tüm özelliklerinden faydalanmak için programı daima güncelleyin.

BIOS'un BIOS dosyasından güncelleme

BIOS'u BIOS dosyasından güncellemek için:

1. **Başlat > Programlar > ASUS > ASUSUpdate > ASUSUpdate**'e tıklayarak Windows® masaüstünden ASUS Güncelleme programını başlatın. ASUS Güncellemesi ana penceresi belirir.
2. İndirmeli menüden **Update BIOS from a file (BIOS'u bir dosyadan güncelle)**'yi seçin, ardından **Next (İleri)**'ye tıklayın.
3. BIOS dosyasını **Açık** pencereden bulun, ardından **Aç**'a tıklayın.


ASUS
Update
V5.27.01
Select the Update Method

1. Update/Save BIOS from/to a file.

2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

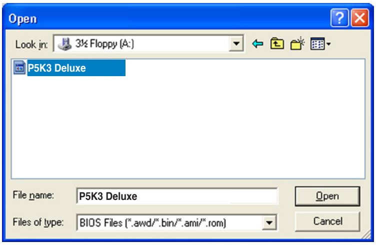
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

Update BIOS from a file

Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

4. Güncelleme sürecini tamamlamak için ekranda verilen talimatları yerine getirin.


Open
Open
Cancel

Look in: 3½ Floppy (A:)

P5K3 Deluxe

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Sistem uyumu ve dengesini sağladığınızdan emin olmak için BIOS varsayılan ayarlarını yüklediğinizden emin olunuz. **Exit (Çıkış)** menüsünde bulunan **Load Setup Defaults (Varsayılan Ayarları Yükle)**'yi seçin.

2.4 ASUS BIOS Updater

ASUS BIOS Updater, BIOS’u DOS ortamında güncelleştirmenizi sağlar. Bu yardımcı program ayrıca güncelleme işlemi sırasında BIOS çalışmadığında veya bozulduğunda yedek olarak kullanabileceğiniz mevcut BIOS dosyasını kopyalamanıza izin verir.

Bu bölümdeki yardımcı program ekran resimleri sadece referans içindir. Asıl yardımcı program ekranı görünümü gösterilenle aynı olmayabilir.

BIOS'u güncellemeden önce

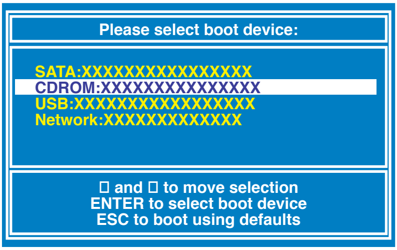
1. Anakart destek DVD'sini ve FAT32/16 biçiminde ve tek bölümlü bir USB flash sürücü hazırlayın.
2. En yeni BIOS dosyasını ve BIOS Updater'ı http://support.asus.com adresindeki ASUS web sitesinden indirin ve USB flash sürücüye kaydedin.

- NTFS, DOS ortamında desteklenmez. BIOS dosyasını ve BIOS Updater'ı NTFS biçiminde bir sabit disk sürücüsüne veya USB flash sürücüsüne kaydetmeyin.
- Düşük disk kapasitesinden dolayı BIOS dosyasını bir diskete kaydetmeyin.

3. Bilgisayarı kapatın ve tüm SATA sabit disk sürülerinin (isteğe bağlı) bağlantılarını kesin.

Sistemi DOS ortamında önyükleme

1. En yeni BIOS dosyasının ve BIOS Updater'ın bulunduğu USB flash sürücüsünü USB bağlantı noktasına takın.
2. Bilgisayarınızı önyükleyin. ASUS Logosu göründüğünde, **BIOS Boot Device Select Menu**'yü (**BIOS Önyükleme Aygıtı Seçim Menüsü)** görüntülemek için <F8> tuşuna basın. Destek DVD’sini optik sürücüye yerleştirin ve önyükleme aygıtı olarak optik sürücüyü seçin.



Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

□ and □ to move selection
ENTER to select boot device
ESC to boot using defaults

3. **Make Disk (Disk Oluştur)** menüsü göründüğünde, öğe numarasına basarak **FreeDOS command prompt (FreeDOS komut istemi)** öğesini seçin.
4. FreeDOS isteminde, diski C sürücüsünden (optik sürücü) D sürücüsüne (USB flash sürücü) geçirmek için **d:** girin ve <Enter> tuşuna basın.

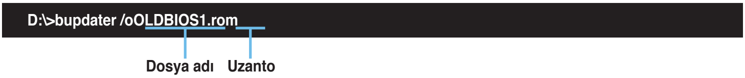
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Geçerli BIOS'u yedekleme

BIOS Updater'ı kullanarak geçerli BIOS dosyasını yedeklemek için.

USB flash sürücünün yazma korumalı olmadığından ve dosyayı kaydetmeye yeterli derecede boş alana sahip olduğundan emin olun.

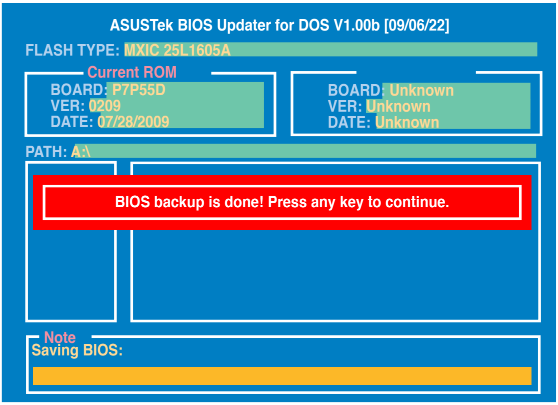
1. FreeDOS isteminde, **bupdater /o[dosya adı]** yazın ve <Enter> tuşuna basın.



```
D:\>bupdater /oOLDBIOS1.rom
```

[dosya adı] ana dosya adı için sekiz alfa-sayısal karakterden ve uzantı adı için üç alfa-sayısal karakterden daha fazla olmayan herhangi bir kullanıcı tarafından atanmış dosya adıdır.

2. BIOS yedekleme işlemini gösteren BIOS Updater yedekleme ekranı belirir. BIOS yedeklemesi tamamlandığında, DOS bilgi isteme ekranına geri dönmek için herhangi bir tuşa basın.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM
BOARD: P7P55D            BOARD: Unknown
VER: 0209                VER: Unknown
DATE: 07/28/2009         DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

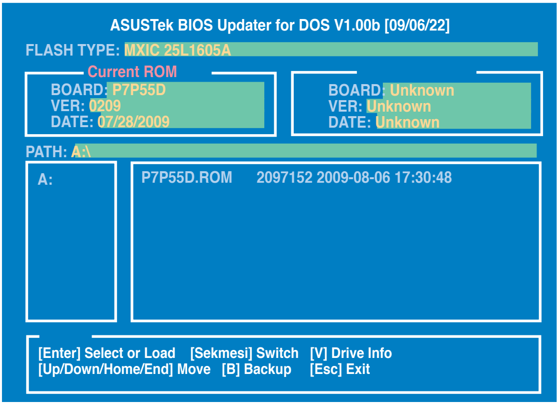
BIOS dosyasının güncellenmesi

BIOS Güncelleyici kullanarak BIOS dosyasını güncellemek için

1. FreeDOS isteminde, **bupdater /pc /g** girin ve <Enter> tuşuna basın.

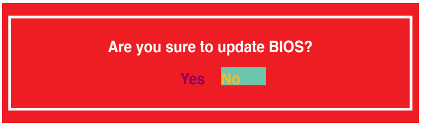
```
D:\>bupdater /pc /g
```

2. BIOS Updater ekranı aşağıdaki gibi belirir.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
        Current ROM
BOARD: P7P55D                    BOARD: Unknown
VER: 0209                        VER: Unknown
DATE: 07/28/2009                 DATE: Unknown
PATH: A:\
A:          P7P55D.ROM     2097152 2009-08-06 17:30:48

[Enter] Select or Load   [Sekmesi] Switch   [V] Drive Info
[Up/Down/Home/End] Move   [B] Backup   [Esc] Exit
```

3. Ekran alanları arasında geçiş yapmak için <Sekmesi> tuşuna basın ve BIOS dosyasını seçmek için <Up/Down/Home/End> tuşlarını kullanın ve <Enter> tuşuna basın. BIOS Updater seçilen BIOS dosyasını kontrol eder ve sizden BIOS güncellemesini onaylamanızı ister.



```
Are you sure to update BIOS?
         Yes   No
```

4. **Yes (Evet)**'i seçin ve daha sonra <Enter>'e basın. BIOS güncellemesi tamamlandığında, BIOS Updater. çıkmak için <ESC>'e basın. Bilgisayarı yeniden başlatın.

Sistem yükleme hatasını önlemek için BIOS güncellenirken sistemi kapatmayın veya sıfırlamayın!

- BIOS Updater. sürüm 1.04 veya daha sonraki sürümler için, yardımcı program BIOS'u güncellemeden önce DOS bilgi isteme ekranından otomatik olarak çıkacaktır.
- Sistem uyum ve durağanlığını sağlamak için BIOS varsayılan ayarlarını yüklediğinizden emin olun. **Exit (Çıkış)** BIOS menüsü altındaki **Load Setup Defaults (Kurulum Ayarlarını Yükle)** öğesini seçin. Ayrıntılı bilgi için anakart kullanma kılavuzundaki bölüm 3'e bakınız.
- BIOS dosyasını güncelledikten sonra bağlantılarını kestiyseniz tüm SATA sabit disk sürücülerini bağladığınızdan emin olun.

Bölüm 3: Sorun Giderme

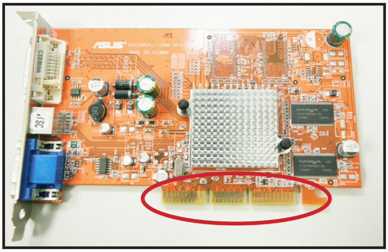
3.1 Anakart DIY için Sorun Giderme

Kendi bilgisayarınızı topladıktan sonra çalıştırma ile ilgili sorunlarla karşılaşabilirsiniz. Bu bölümde işletim sistemine girmeden önce bilgisayarınız ile ilgili bazı yaygın sorulara cevaplar bulunmaktadır. Temel sorun giderme için bu bölümü okuyun. ASUS teknik servisi ile temasa geçmek ya da ürünü garanti servisi için geri göndermek size zaman kazandıracaktır.

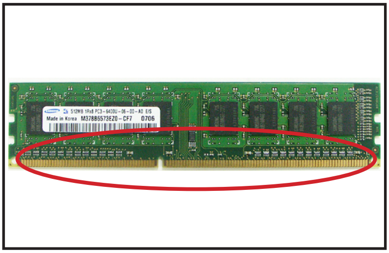
3.1.1 Temel sorun giderme

A. Kötü bağlantı

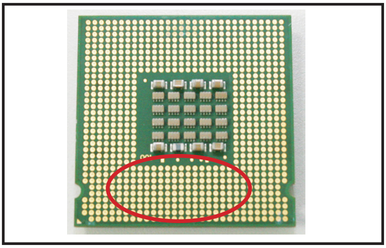
1. Altın kontak ya da pinlerde pislik olmadığından emin olun.
2. Pamuk çubuk ya da silgi kullanarak altın kontağı yavaşça ovun. Silgi kırıntılarını temizlemeyi unutmayın.



VGA kartı altın kontak



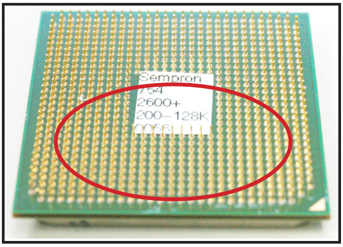
DIMM altın kontak



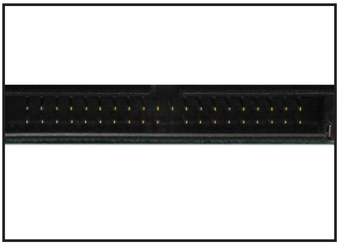
LGA775 işlemci altın kontak noktaları

Kart ya da CPU'yu kenarlarından tutun ve altın kontağa DOKUNMAYIN. Statik elektrik ciddi olarak cihaza zarar verir.

3. Konektör pinleri ya da CPU pinlerinde kırık ya da kıvrık pin olmadığından emin olun. Kırık ya da kıvrık pin, bileşenin kötü çalışmasına neden olacaktır. Daha fazla destek için bayinizle temasa geçin.



AMD CPU altın pinler

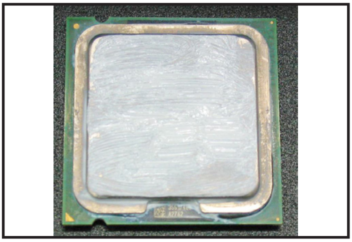


Konektör pinleri

Kırık ya da kıvrık pinler satın alındıktan sonra meydana gelmişse, bayiniz tarafından onarım ücreti istenebilir. Bazı durumlarda kırık ya da kıvrık pinler ONARILAMAZ.

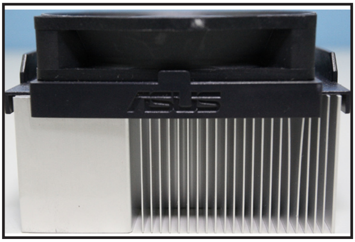
B. CPU'nun aşırı ısınması

1. CPU yüzeyini temiz bezle silerek temizleyin. CPU'nun ısı emici ile temas edeceği bölgeye bir kaç damla termal macun uygulayın. Macunun ince düzgün bir tabaka olarak sürüldüğünden emin olun.

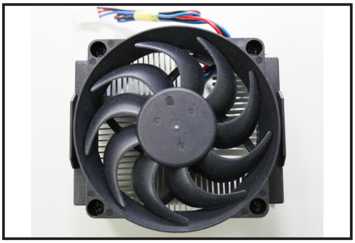


CPU yüzeyi

2. Isı emici ve fan üzerinde pislik olmadığından emin olun.



Isı emici ve fan yan görünümü



Isı emici ve fan üst görünümü

3. Fan dönüşünü yavaşlatacak pislikleri temizlemek için ısı emici ve fan üreticilerinin talimatlarını izleyin.

3.2 Diğer yaygın sorunlar

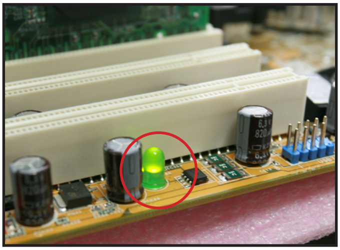
- Sistemden cihazları sökerken tüm güç kablolarının çıkarılmış olduğundan emin olun.
- Açılış otomatik sınama (POST) sırasında ekranda tüm hata mesajları gösterilecektir.
- BIOS bip sesleri varsa, ayrıntılar için bölüm 1.11’e bakın.
- Daha ileri kontrol için aşağıdaki kontrol listesini inceleyin.

	Kontrol öğeleri					
	Güç LED’i	**Ekran göstergesi**	**Isı emici ve fan**	**BIOS Bip Sesleri**	**Hata mesajları**	**Referans sayfa**
Güç yok	Kapalı	Hayır	Durma	Hayır	N/A	3-4
Ekran göstergesi yok	Açık	Hayır	Durma	Hayır	N/A	3-5
	Açık	Hayır	Çalışma	Hayır	N/A	3-5
	Açık	Hayır	Çalışma	Evet	N//A	3-5
İşletim Sistemine Giriş Başarısız	Açık	Evet	Çalışma	Evet	Evet	3-5
	Açık	Evet	Çalışma	Hayır	Evet	3-5
	Açık	Evet	Çalışma	Hayır	Hayır	3-5

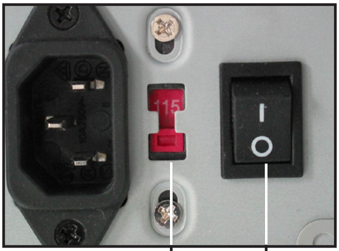
Sorun giderilir fakat yeni bir sorun ortaya çıkarsa kontrol listesine tekrar göz atın. Sorun devam ederse daha fazla yardım için bayinizle ya da ASUS teknik destek ekibi ile temasa geçin.

3.2.1 Güç yok

ASUS anakartlar, yedek güç LED'i ile birlikte gelmektedir. LED'in yanması sistemin AÇIK olduğunu gösterir. LED sönük kalırsa sorunu çözmek için aşağıdaki talimatları izleyin.



1. Güç kaynağınızın bölgenizdeki AC giriş voltajına ayarlı olduğundan ve güç kaynağının açık olduğundan emin olun.

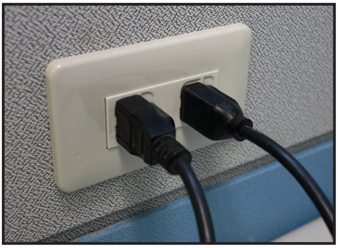


AC giriş voltaj düğmesi

Güç düğmesi
"—": Açık;
"O": Kapalı

- AC giriş voltajını ayarlamadan önce güç fişini çıkardığınızdan emin olun. Fişi çıkarmamanız güç kaynağı ünitesine ciddi zarar verecektir.
- Güç kaynağının doğru AC giriş voltajına ayarlanmaması sisteme ciddi bir şekilde zarar verir.

2. Güç kablosunun duvar prizine bağlı olduğundan emin olun.
   - Güç fişini doğrudan duvar prizine bağlayın. Fişi uzatma kablosuna, kesintisiz güç kaynağı (UPS) ya da diğer cihazlara BAĞLAMAYIN.
   - Sistem ve monitöre ait güç kablolarını yer değiştirerek duvar prizinin normal çalışıp çalışmadığını kontrol edin.



3. Sorun devam ederse yeni güç kaynağı ünitesi için bayinizle temasa geçebilirsiniz. Güç kaynağı ünitesi işlevini yerine getiriyorsa, anakart garanti servisi için ASUS anakart bayinizle temasa geçin.

3.2.2 Ön yükleme başarısız; Görüntü yok

Ön yükleme yapmama ve ekrana görüntünün gelmemesi sorunlarının çoğu cihaz kusuru ya da yanlış kurulumdan kaynaklanır. Sorunu çözmek için aşağıdaki talimatları izleyin.

1. Sistem ve monitör dahil tüm güç kablolarının bağlı olduğundan emin olun.
2. Sorunun genişletme cihazlarından kaynaklanıp kaynaklanmadığından emin olun.
   - Tüm genişletme kartı ve cihazlarını çıkarın. Sadece anakart, monitör, VGA kartı, bellek modülleri, güç kaynağı ünitesi, ısı emici ve fan, klavye ve fare kullanarak sistemi yeniden başlatın.
   - Sistem normal olarak çalışıyorsa, genişletme cihazlarından biri soruna neden olmuştur. Çıkardığınız genişletme cihazlarını sisteme tek tek monte edin ve arızalı cihazı bulun.
3. Sorunun temel sistem cihazlarından kaynaklanıp kaynaklanmadığından emin olun.
   - Yedek cihazlarınız varsa, arızalı cihazı bulmak için “bellek modülü, CPU, anakart, sabit/optik disk sürücü, klavye/fare” sırasıyla cihazları takarak deneyebilirsiniz.

Arızalı cihazı bulduğunuzda servis için bayinizle temasa geçin.

3.2.3 İşletim sistemine giriş başarısız

1. Bir donanım ekledikten sonra sorun ortaya çıkarsa. Eklenen donanımı çıkarın ve sistemi yeniden başlatın. Sistem donanımsız olarak normal çalışıyorsa, cihaz arızalı olabilir ya da sistemle uyumsuz olabilir. Yardım için cihaz bayisi ile temasa geçin.
2. Bir yazılım ya da sürücü yükledikten sonra sorun ortaya çıkarsa. Sorunu çözmek için aşağıdaki talimatları izleyin.
   a. İşletim sistemine güvenli modda girin ve yazılım ya da sürücüyü kaldırın.
   b. Daha fazla destek için işletim sistemi şirketi ile temasa geçin.
   c. Önceki talimatlar sorunu çözemezse, sabit disk sürücünüzü biçimlendirmeniz (formatlama) ve yeni bir işletim sistemi kurmanız gerekebilir.
3. BIOS ayarlarını değiştirdikten sonra sorun ortaya çıkarsa, sistemi yeniden başlatın ve BIOS’a girerek kurulum varsayılan değerlerini yükleyin. Ayrıntılar için anakart kullanıcı kılavuzuna bakın.
4. Sorun bilgisayara virüs bulaşması ya da bozuk dosya nedeniyle ortaya çıkmışsa sorunu çözmek için aşağıdaki talimatları izleyin.

a. İşletim sistemine güvenli modda girin ve anti-virüs uygulaması kullanarak tam virüs taraması gerçekleştirin.

b. Daha fazla destek için işletim sistemi şirketi ile temasa geçin.

c. Önceki talimatlar sorunu çözemezse, sabit disk sürücünüzü biçimlendirmeniz (formatlama) ve yeni bir işletim sistemi kurmanız gerekebilir.

3.2.4 Sıkça Sorulan Sorular

Q1: POST'ta rapor edilen bellek ile mevcut kurulu bellek farklı.

A1: Rapor edilen bellek farkı, arızalı bellek modüllerinden ya da DIMM bellek modülünün yanlış takılmasından kaynaklanabilir. DIMM bellek modüllerinin sağlıklı ve doğru olarak takıldıklarından emin olun. Ayrıntılar için anakart kullanıcı kılavuzuna bakın. 4.0 GB bellek taktığınızda 3.X GB rapor edilmesi normaldir.

Q2. Sistem disket sürücüyü algılayamıyor fakat disket sürücü ışığı yanıyor.

A2: Disket sürücü kabloları yanlış takılı. Kablo üzerindeki kırmızı şeridin (pin1 ucu) disket sürücüdeki pin1'e karşılık geldiğinden emin olun.

Q3: USB flaş disk ya da harici sabit disk sürücülerinden sonra işletim sistemine girilemiyor.

A3: Sistem USB flaş disk ya da USB ara yüz sabit disklerini algıladığında, açılış sırasını değiştirebilir. USB cihazlarını çıkarıp sistemi yeniden başlatın.

Q4: Windows XP kurulumu sırasında takılı sabit disk sürücüler RAID denetleyicisine yerleştirilemiyor.

A4: Windows XP'de RAID denetleyicisi yoktur bu nedenle sabit diskler algılanamaz. RAID denetleyici sürücüsünü bir diskete kopyalayın ve Windows XP diski ile sistemi başlatın, sürücünün disketten okunması için <F6> tuşuna basın. Ayrıntılar için anakart kullanıcı kılavuzuna bakın.

Bölüm 4: Bilgisayar bakımı ile ilgili ipuçları

4.1 Bilgisayarınızın uygun bakımı

Kişisel bilgisayarınız diğer ev eşyaları gibidir. Bilgisayarınızı rutubetten, doğrudan güneş ve statik elektrik kaynaklarından uzak tutun. Hasar durumunda bilgisayarınız açıldığı zaman bilgisayarı hareket ettirmemelisiniz. Dahili toz, disk sürücüsünün çalışmasını etkiler ve bilgisayarın çökmesi ya da bileşenlerin hasar görmesine neden olacak aşırı ısınma sorunu çıkmasına yardımcı olur.

4.2 Temel bilgiler

1. Kullanmadığınız zaman bilgisayarınızın üzerini örtün.
2. Bilgisayarınızı kullanırken monitör üzerine havalandırma deliklerini tıkayacak bir şey koymayın. Aşırı ısı, monitörün arızalı çalışmasına neden olur.
3. Bilgisayarı duvara yakın yerleştirmeyin ve ısı dağılımı için biraz boşluk bırakın. Aşırı ısı sistemin çökmesine neden olur.
4. Bilgisayarı sabit bir yüzeye yerleştirin.
5. Bilgisayarı aşırı sıcak alanlardan uzak tutun. 5°C - 30°C aralığı en iyi ortam sıcaklığıdır. Daha iyi ısı dağılımı elde etmek için klima ya da elektrik fanı kullanın.
6. Yetersiz hava akışını önlemek için yassı kabloları düzenli bir şekilde yerleştirin.

4.3 Kullanım bilgileri

1. Bilgisayarınızı düzenli olarak açıp kapatın. Bilgisayarınızın uzun bir süre açık kalması gerekiyorsa daha iyi bir sistem/CPU fanı ve yüksek voltajlı güç kaynağı ünitesi kullanın.
2. Ani güç arızası sabit disk sürücüye hasar verir. Güç kaynağı kararsız ise bilgisayarınıza kesintisiz güç kaynağı eklemeniz önerilir.
3. Düzenli olarak veri dosyalarını yeniden düzenleyin, virüs taraması, virüs kod yenilemesi ve disk birleştirmesi yapın.
4. Düzenli olarak bilgisayarınızın tozunu silin ve bilgisayarınızı temizleyin. (Temizlikten önce tüm güç kablolarının fişini çekin)
    - Anakartı ve sabit/optik disk sürücülerini sökün, daha sonra hava ya da yumuşak fırça ile temizleyin.

    - Anti statik vakum ile güç kaynağı ünitesi üzerindeki toz ve atıkları alın.

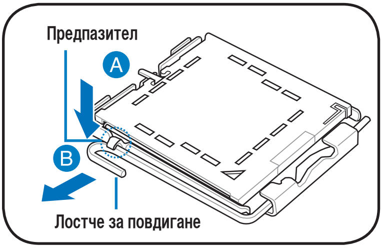
4.4 İpuçları

1. Bilgisayarınız uzun süre kullanılmayacaksa, nemin vereceği zararı önlemek için kasa içine bir miktar kurutucu, nem emici madde koyun.
2. Bazı sıcak ve nemli iklime sahip bölgelerde, iki haftada bir bilgisayarınızı açmanız önerilir. Bu işlem ayrıca nemin vereceği zararı da önlemeye yardımcı olur.

Глава 1: Бързо начало

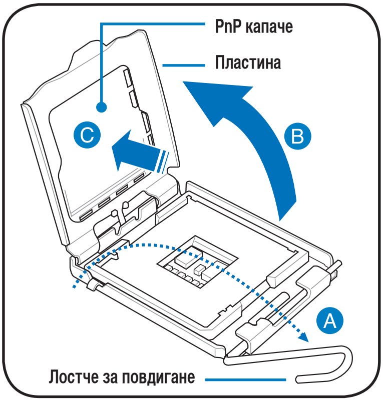
1.1 Инсталиране на централния процесор

1.1.1 Гнездо Intel® LGA775


Предпазител
A
B
Лостче за повдигане

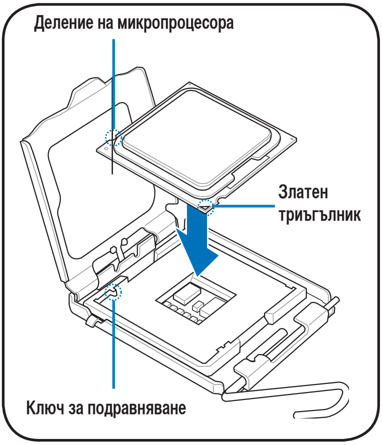
1. Намерете гнездото за процесора върху дънната платка.
2. Натиснете лостчето с палец (A), след което го преместете надясно (Б) докато не се освободи предпазителя.

За да предотвратите повреда на пиновете на гнездото, не махайте PnP капачката освен ако не инсталирате микропроцесор.


PnP капаче
Пластина
C
B
A
Лостче за повдигане

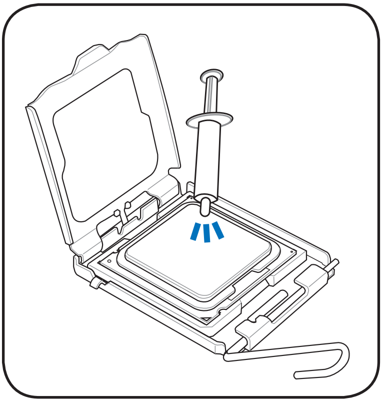
3. Повдигнете лостчето по посока на стрелката до ъгъл 135º.
4. Повдигнете пластината с палеца и показалеца си на ъгъл 100º. (4A), след което натиснете PnP капачето на прозореца на пластината, за да отстраните (4Б).

5. Поставете микропроцесора върху гнездото като се уверите, че златния триъгълник е в долния ляв ъгъл на гнездото. Повдигнете ключа за изравняване до делението на микропроцесора.



Микропроцесорът пасва само в едно положение. НЕ насилвайте микропроцесора, за да го накарате да влезе в гнездото; по този начин ще предпазите конекторите от изкривяване и микропроцесора от повреда!

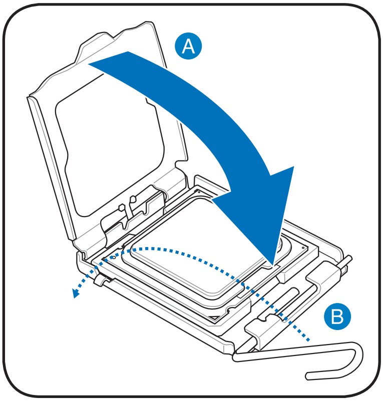
6. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

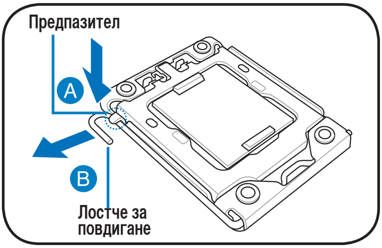
7. Затворете пластината (A), след което натиснете лостчето (Б) докато не щракне предпазителят.



1.1.2 Intel® LGA1366 гнездо

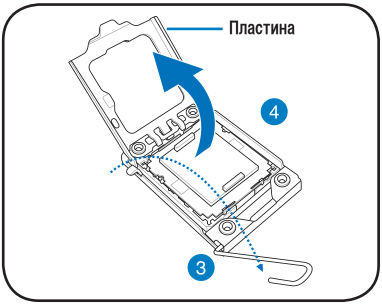
1. Намерете гнездото на микропроцесора върху дънната платка.

2. Натиснете лостчето с палец (А), след което го преместете надясно (Б) докато не се освободи предпазителя.

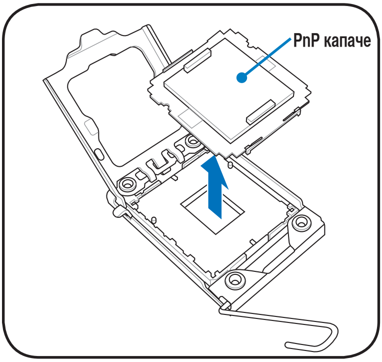

Предпазител
A
B
Лостче за повдигане

За да предотвратите повреда на пиновете на гнездото, не махайте PnP капачката освен ако не инсталирате микропроцесор.

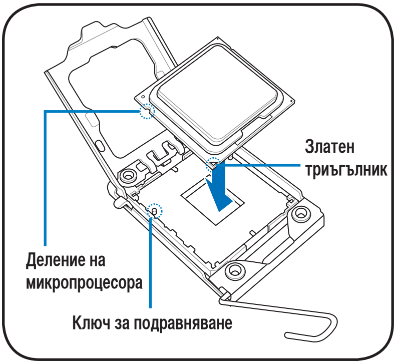
3. Повдигнете лостчето по посока на стрелката до ъгъл 135°.
4. Повдигнете пластината с палеца и показалеца си на ъгъл 100°.


Пластина
4
3

5. Отстранете PnP капачето от гнездото на микропроцесора.

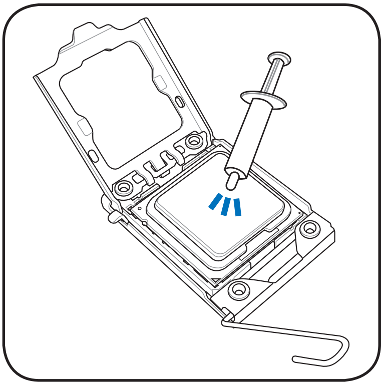


6. Поставете микропроцесора върху гнездото като се уверите, че златния триъгълник е в долния ляв ъгъл на гнездото. Повдигнете ключа за изравняване до делението на микропроцесора.



Микропроцесорът пасва само в едно положение. НЕ насилвайте микропроцесора, за да го накарате да влезе в гнездото; по този начин ще предпазите конекторите от изкривяване и микропроцесора от повреда!

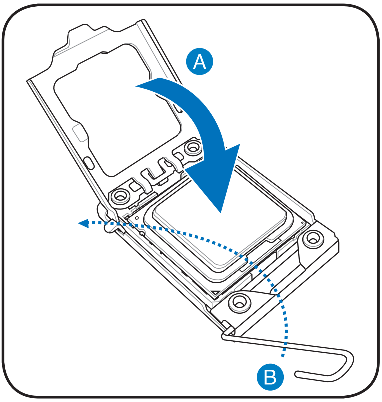
7. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

8. Затворете пластината (A), след което натиснете лостчето (Б) докато не щракне предпазителят.



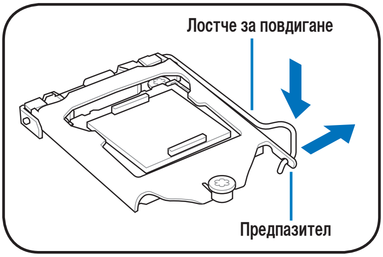
1.1.3 Цокъл Intel® LGA1156

Микропроцесорът LGA1155 не е съвместим с гнездо LGA1156. НЕ ИНСТАЛИРАЙТЕ микропроцесор LGA1155 в гнездо LGA1156.

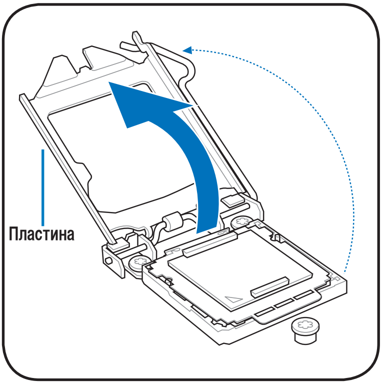
1. Вижте къде върху дънната платка е разположен цокълът за процесора.

2. Натиснете надолу с палец притискащото лостче (A) и после го отместете надясно (B), докато се освободи от придържащия зъб.

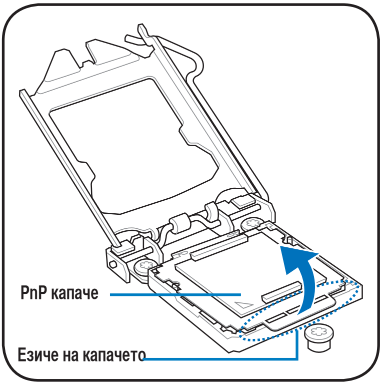
   За да предпазите от повреда крачетата на цокъла, не сваляйте капачката, освен ако няма да монтирате процесор.



3. Завъртете притискащото лостче по посока на стрелката, докато притискащата рамка се повдигне напълно.

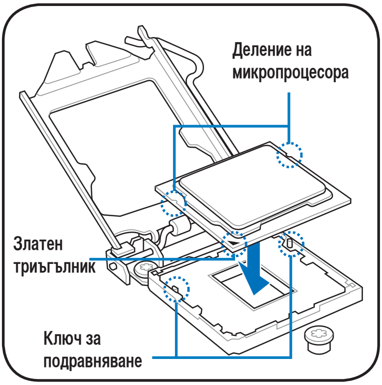


4. Отстранете PnP капачето от гнездото на микропроцесора като повдигнете само езичето.



5. Разположете процесора над цокъла и го ориентирайте така, че златният триъгълник да е над долния-ляв ъгъл на цокъла; след това го поставете в цокъла, като внимавате центриращите издатини да попаднат във врязванията в корпуса на процесора.

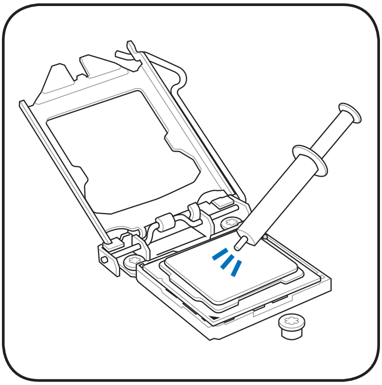
Процесорът може да се постави в цокъла само по един начин - с правилната ориентация. НЕ прилагайте сила при монтиране на процесора в цокъла, за да не огънете крачетата и да не повредите процесора!



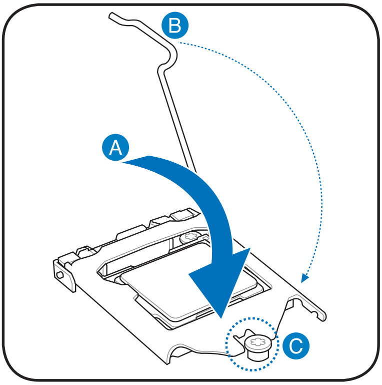
6. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.

Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

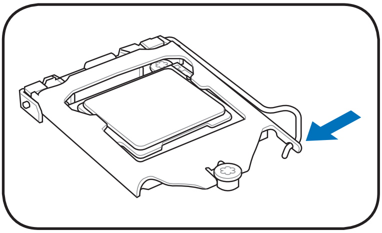
Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.



7. Затворете притискащата рамка (A) и натиснете надолу притискащото лостче (B) така, че предният край на рамката да застане под фиксатора (C).



8. Вкарайте притискащото лостче под придържащия зъб.

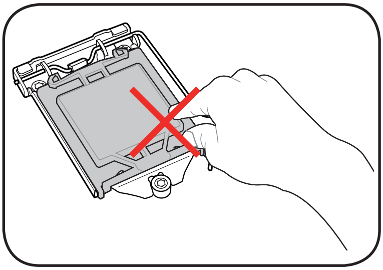


1.1.4 Цокъл Intel® LGA1155 (PnP капак на зареждащата пластина)

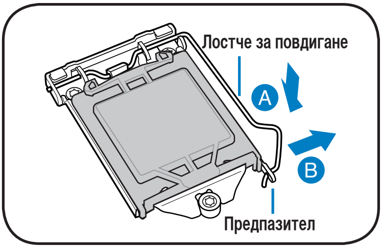
Микропроцесорът LGA1156 не е съвместим с гнездо LGA1155. НЕ ИНСТАЛИРАЙТЕ микропроцесор LGA1156 в гнездо LGA1155.

1. Вижте къде върху дънната платка е разположен цокълът за процесора.

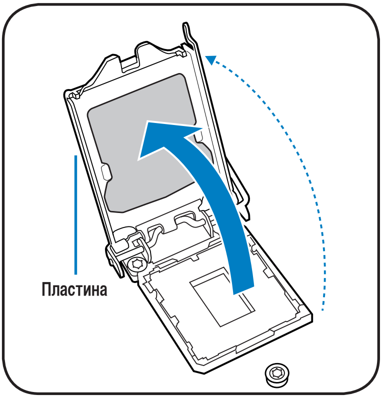
2. Не махайте PnP капака от CPU гнездото преди да монтирате CPU.



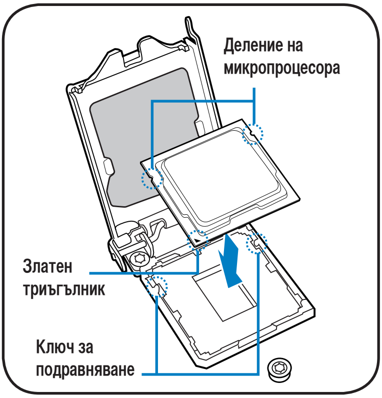
3. Натиснете надолу с палец притискащото лостче (A) и после го отместете надясно (B), докато се освободи от придържащия зъб.



4. Завъртете притискащото лостче по посока на стрелката, докато притискащата рамка се повдигне напълно.

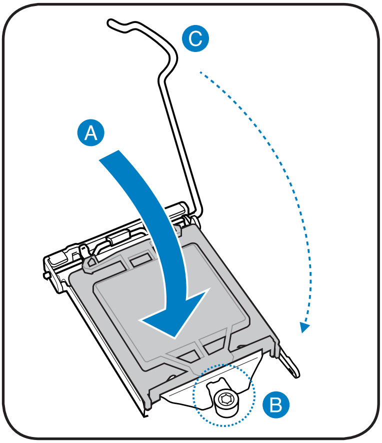


5. Разположете процесора над цокъла и го ориентирайте така, че златният триъгълник да е над долния-ляв ъгъл на цокъла; след това го поставете в цокъла, като внимавате центриращите издатини да попаднат във врязванията в корпуса на процесора.

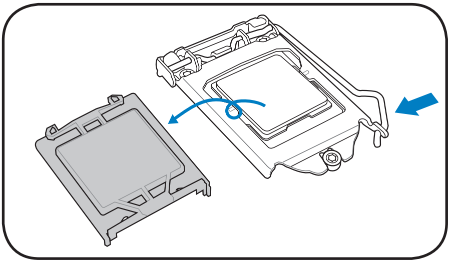

Деление на микропроцесора
Златен триъгълник
Ключ за подравняване

Процесорът може да се постави в цокъла само по един начин - с правилната ориентация. НЕ прилагайте сила при монтиране на процесора в цокъла, за да не огънете крачетата и да не повредите процесора!

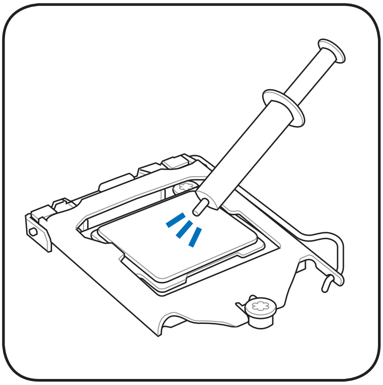
6. Затворете зареждащата пластина (A), като се уверите, че предният ръб на зареждащата пластина се плъзга под предпазителя (Б). Натиснете надолу лоста (C).



7. Поставете лоста под предпазителя за задържане, за да отстраните PnP капака от CPU гнездото.



8. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

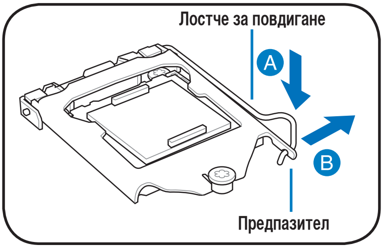
1.1.5 Цокъл Intel® LGA1155 (PnP капак под зареждащата пластина)

Микропроцесорът LGA1156 не е съвместим с гнездо LGA1155. НЕ ИНСТАЛИРАЙТЕ микропроцесор LGA1156 в гнездо LGA1155.

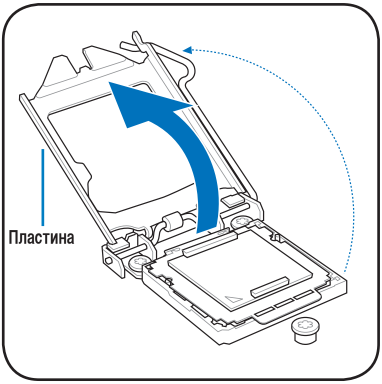
1. Вижте къде върху дънната платка е разположен цокълът за процесора.

2. Натиснете надолу с палец притискащото лостче (A) и после го отместете надясно (B), докато се освободи от придържащия зъб.

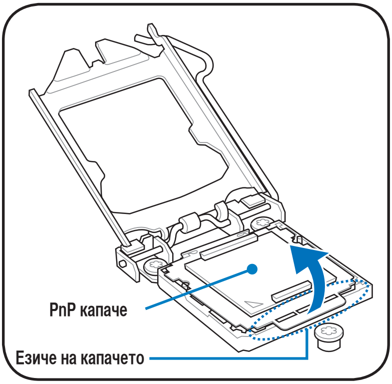
За да предпазите от повреда крачетата на цокъла, не сваляйте капачката, освен ако няма да монтирате процесор.



3. Завъртете притискащото лостче по посока на стрелката, докато притискащата рамка се повдигне напълно.

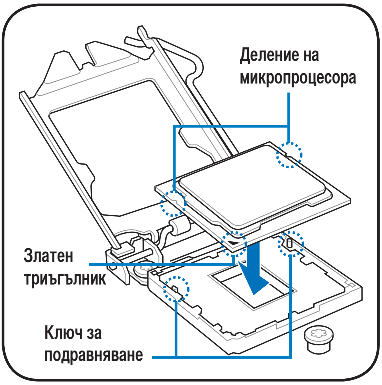


4. Отстранете PnP капачето от гнездото на микропроцесора като повдигнете само езичето.



5. Разположете процесора над цокъла и го ориентирайте така, че златният триъгълник да е над долния-ляв ъгъл на цокъла; след това го поставете в цокъла, като внимавате центриращите издатини да попаднат във врязванията в корпуса на процесора.

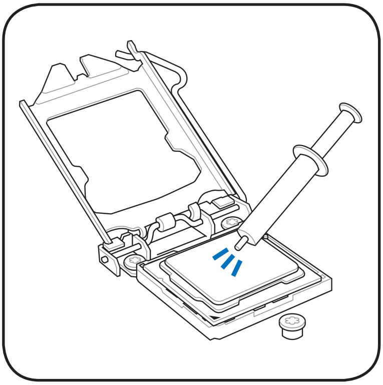
Процесорът може да се постави в цокъла само по един начин - с правилната ориентация. НЕ прилагайте сила при монтиране на процесора в цокъла, за да не огънете крачетата и да не повредите процесора!



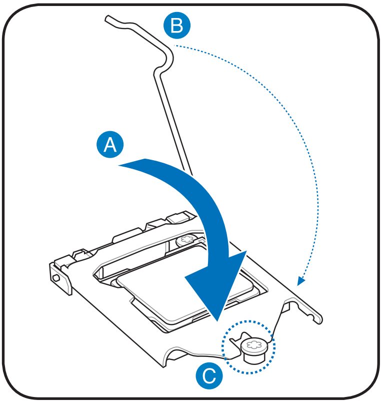
6. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.

Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

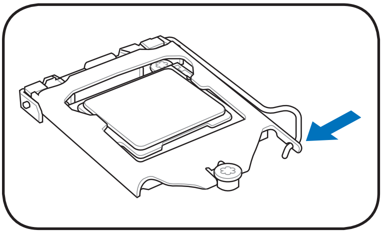
Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.



7. Затворете притискащата рамка (A) и натиснете надолу притискащото лостче (B) така, че предният край на рамката да застане под фиксатора (C).



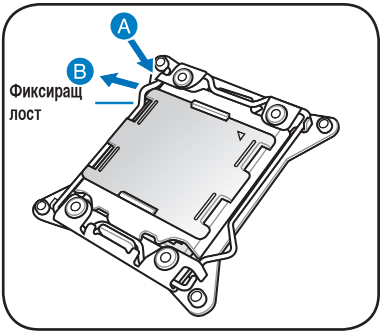
8. Вкарайте притискащото лостче под придържащия зъб.



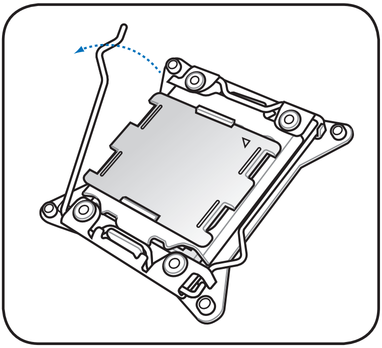
1.1.6 Цокъл Intel® LGA2011

1. Намерете гнездото за процесора върху дънната платка.
2. Натиснете лостчето с палец (A), след което го преместете надясно (Б) докато не се освободи предпазителя.

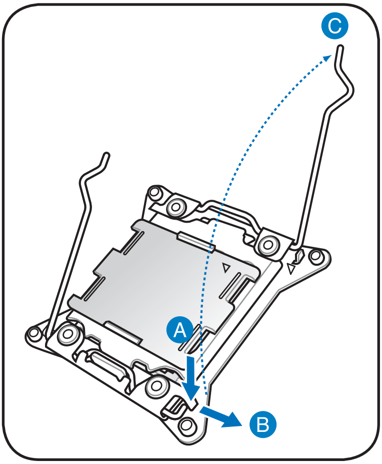
За да предотвратите повреда на пиновете на гнездото, не махайте PnP капачката освен ако не инсталирате микропроцесор.



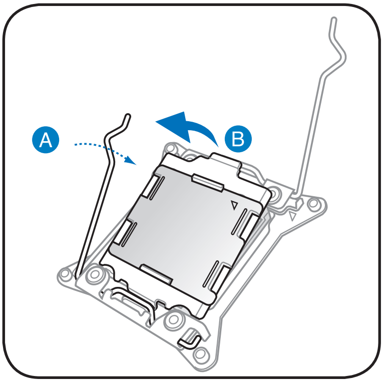
3. Повдигнете леко лоста за фиксиране по посока на стрелката.



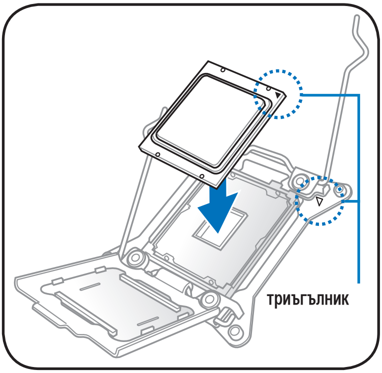
4. Затворете притискащата рамка (A) и натиснете надолу притискащото лостче (B) така, че предният край на рамката да застане под фиксатора (C). Сиране по посока на стрелката (C).



5. Натиснете левия лост (A), за да повдигнете силовата платка (B).

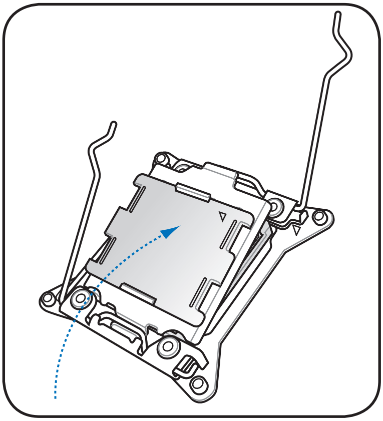


6. Поставете процесора върху цокъла, като триъгълният знак трябва да бъде в десния горен ъгъл на цокъла.

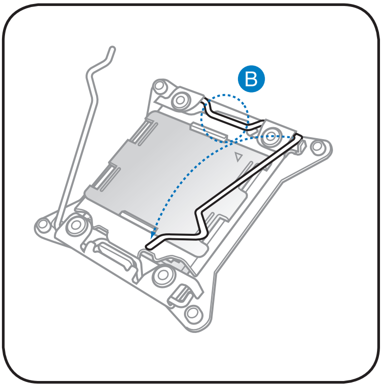


> Микропроцесорът пасва само в едно положение. НЕ насилвайте микропроцесора, за да го накарате да влезе в гнездото; по този начин ще предпазите конекторите от изкривяване и микропроцесора от повреда!

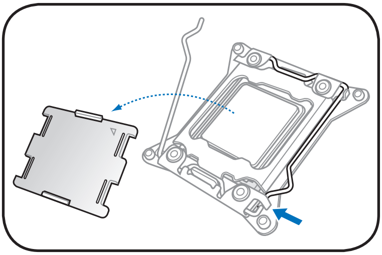
7. Затваряне на плоча натоварване.



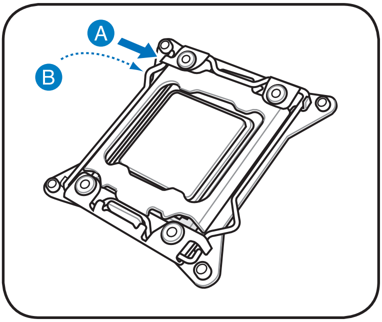
8. Натиснете надолу десния фиксиращ лост (A), за да фиксирате ръба на силовата платка с лоста (B).



9. Вкарайте десния фиксиращ лост под зъбчето за закрепване. Свалете капачката PnP от цокъла на процесора.



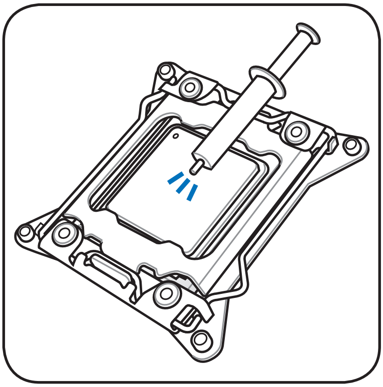
10. Натиснете надолу левия лост (A), след това вкарайте лоста под зъбчето за закрепване (B).



11. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.

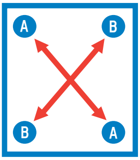
Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

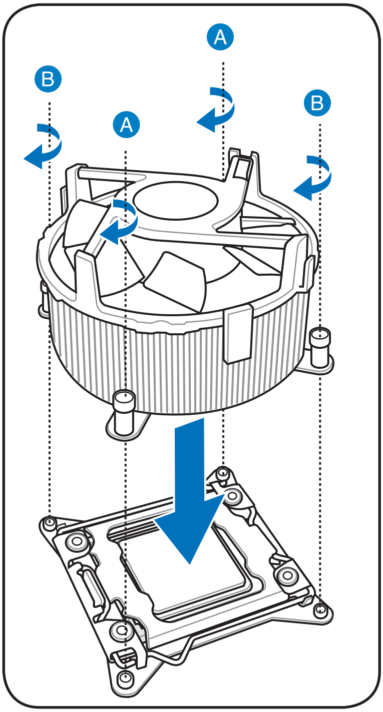
Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.



12. Поставете радиатора върху инсталирания процесор така, че четирите фиксатора да съвпаднат с отворите в цокъла на процесора.
13. Завийте леко четирите винта с кръстата отвертка, за да закрепите радиатора върху цокъла на процесора. След като винтовете са закрепени, затегнете ги един по един за надеждно фиксиране на радиатора.

Затягането на четирите винта на радиатора да се направи по диагонал.



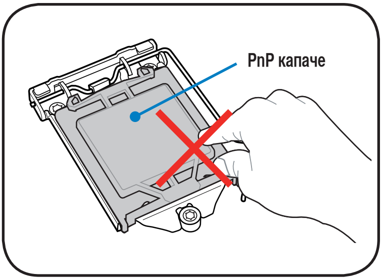


1.1.7 Цокъл Intel® LGA1150 (PnP капак на зареждащата пластина)

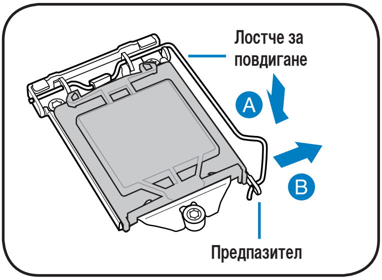
Уверете се, че сте инсталирали правилен микропроцесор, предназначен само за LGA1150 гнезда. НЕ инсталирайте микропроцесори, предназначени за LGA1155 и LGA1156 гнезда в LGA1150 гнездото.

1. Вижте къде върху дънната платка е разположен цокълът за процесора.

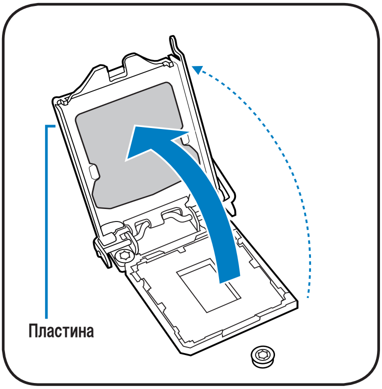
НЕ отстранявайте PnP капачето от гнездото на микропроцесора. Ако направите това, възможно е да огънете изводите на гнездото. Вижте илюстрацията по-долу за местоположението на PnP капачето.



2. Натиснете надолу с палец притискащото лостче (A) и после го отместете надясно (B), докато се освободи от придържащия зъб.

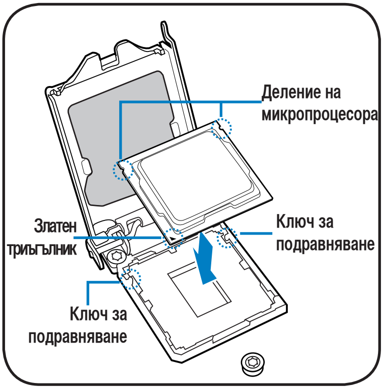


3. Завъртете притискащото лостче по посока на стрелката, докато притискащата рамка се повдигне напълно.

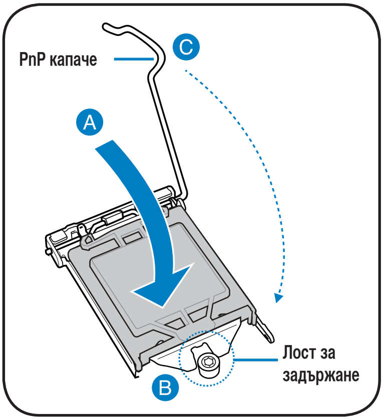


4. Разположете процесора над цокъла и го ориентирайте така, че златният триъгълник да е над долния-ляв ъгъл на цокъла; след това го поставете в цокъла, после напаснете жлебовете на микропроцесора спрямо зъбчетата за подравняване на гнездото.

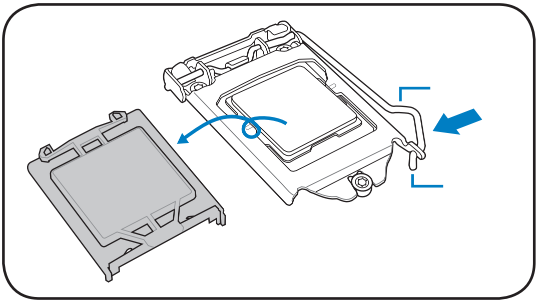
Процесорът може да се постави в цокъла само по един начин - с правилната ориентация. НЕ прилагайте сила при монтиране на процесора в цокъла, за да не огънете крачетата и да не повредите процесора!


Деление на микропроцесора
Златен триъгълник
Ключ за подравняване
Ключ за подравняване

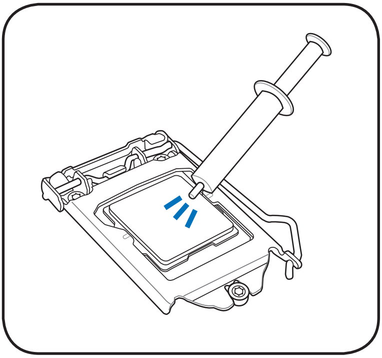
5. Затворете зареждащата пластина (A), като се уверите, че предният ръб на зареждащата пластина се плъзга под предпазителя (Б). Натиснете надолу лоста (C).


PnP капаче
C
A
Лост за задържане
B

6. Поставете лоста под предпазителя за задържане, за да отстраните PnP капака от CPU гнездото.



7. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

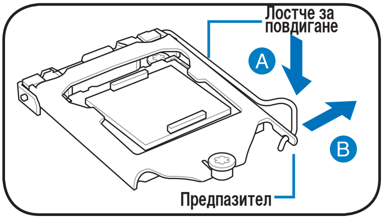
Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

1.1.8 Цокъл Intel® LGA1150 (PnP капак под зареждащата пластина)

Уверете се, че сте инсталирали правилен микропроцесор, предназначен само за LGA1150 гнезда. НЕ инсталирайте микропроцесори, предназначени за LGA1155 и LGA1156 гнезда в LGA1150 гнездото.

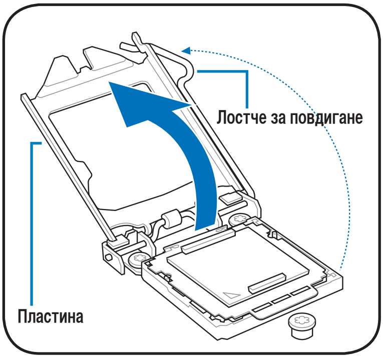
1. Вижте къде върху дънната платка е разположен цокълът за процесора.
2. Натиснете надолу с палец притискащото лостче (A) и после го отместете надясно (B), докато се освободи от придържащия зъб.

НЕ отстранявайте PnP капачето от гнездото на микропроцесора. Ако направите това, възможно е да огънете изводите на гнездото.



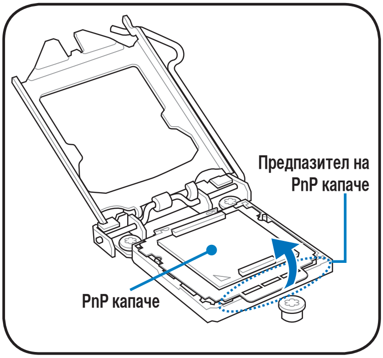
Лостче за повдигане
A
B
Предпазител

3. Завъртете притискащото лостче по посока на стрелката, докато притискащата рамка се повдигне напълно.



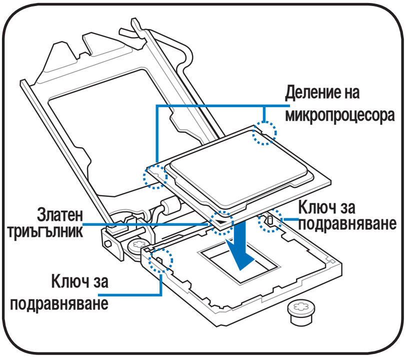
Лостче за повдигане
Пластина

4. Отстранете PnP капачето от гнездото на микропроцесора като повдигнете само езичето.



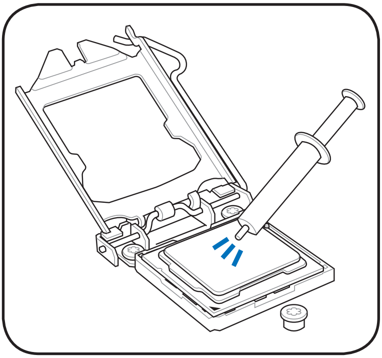
Предпазител на PnP капаче
PnP капаче

5. Разположете процесора над цокъла и го ориентирайте така, че златният триъгълник да е над долния-ляв ъгъл на цокъла; след това го поставете в цокъла, после напаснете жлебовете на микропроцесора спрямо зъбчетата за подравняване на гнездото.


Деление на микропроцесора
Златен триъгълник
Ключ за подравняване
Ключ за подравняване

Процесорът може да се постави в цокъла само по един начин - с правилната ориентация. НЕ прилагайте сила при монтиране на процесора в цокъла, за да не огънете крачетата и да не повредите процесора!

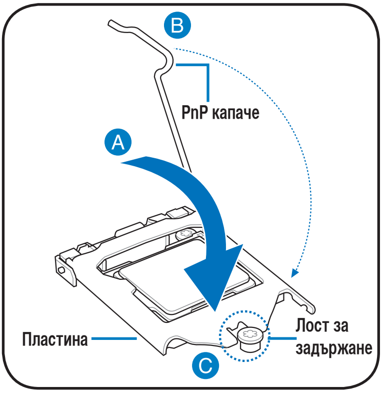
6. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



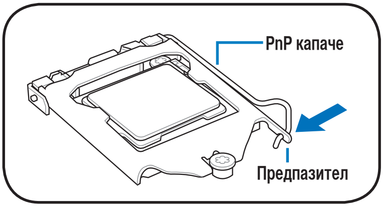
Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

7. Затворете притискащата рамка (A) и натиснете надолу притискащото лостче (B) така, че предният край на рамката да застане под фиксатора (C).


B
PnP капаче
A
Пластина
Лост за задържане
C

8. Вкарайте притискащото лостче под придържащия зъб.

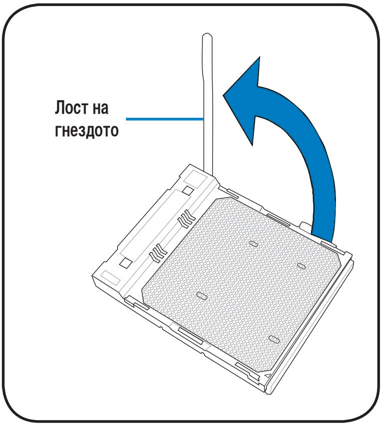

PnP капаче
Предпазител

1.1.9 AMD AM2 / AM2+ / AM3 гнездо

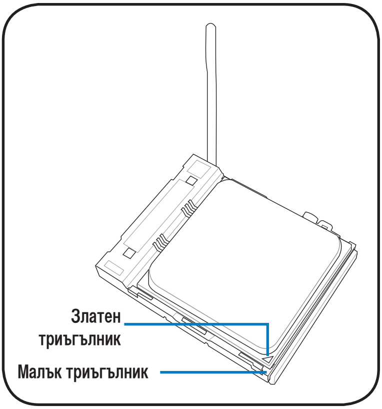
- Гнездата AMD AM2 и AM2+ са съвместими с процесори AMD AM2, AM2+ и AM3.
- AMD AM3 гнездата са съвместими с AMD AM3 процесори. НЕ монтирайте AMD AM2+ / AM2 процесор в AM3 гнездо. Само определени модели на AM3 дънни платки поддържат AM3+ процесори чрез надграждане на BIOS. Вижте сайта за поддръжка на ASUS за повече информация.

1. Намерете гнездото на микропроцесора върху дънната платка.
2. Натиснете лостчето настрани, докато не се заключи гнездото, след което го повдигнете на ъгъл 90° градуса.

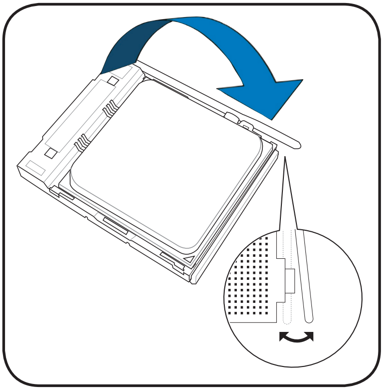
Уверете се, че лостчето на гнездото е повдигнато на ъгъл 90°. В противен случай микропроцесорът няма да пасне напълно.



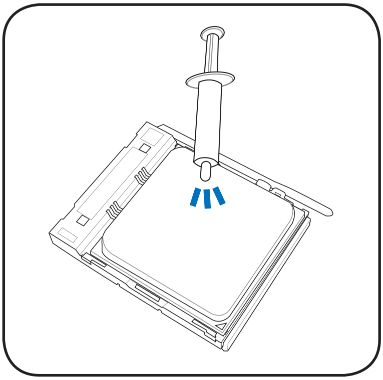
3. Поставете микропроцесора над гнездото, така че ъгълът на микропроцесора със златния триъгълник да пасне в ъгъла на гнездото с малкия триъгълник.
4. Внимателно поставете микропроцесора в гнездото докато не пасне.



5. Когато микропроцесорът е на мястото си, натиснете лостчето на гнездото надолу, за да захванете микропроцесора. Лостчето щраква, за да покаже, че е в заключено положение.



6. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

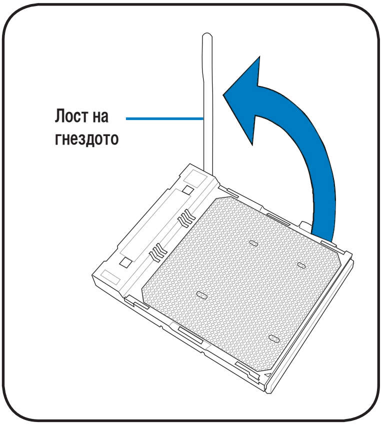
Български

1.1. 10 AMD AM3+ гнездо

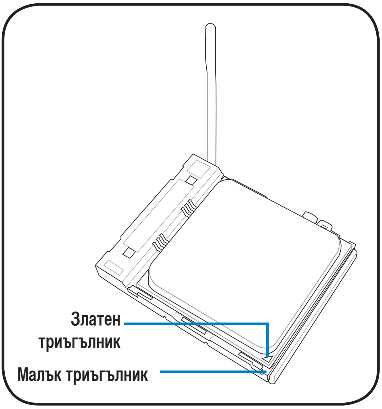
AMD AM3+ гнездата са съвместими с AMD AM3+ и AM3 процесори. Само определени модели на AM3 дънни платки поддържат AM3+ процесори чрез надграждане на BIOS. Вижте сайта за поддръжка на ASUS за повече информация.

1. Намерете гнездото на микропроцесора върху дънната платка.
2. Натиснете лостчето настрани, докато не се заключи гнездото, след което го повдигнете на ъгъл 90 градуса.

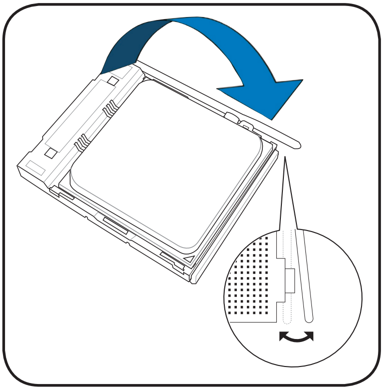
Уверете се, че лостчето на гнездото е повдигнато на ъгъл 90. В противен случай микропроцесорът няма да пасне напълно.



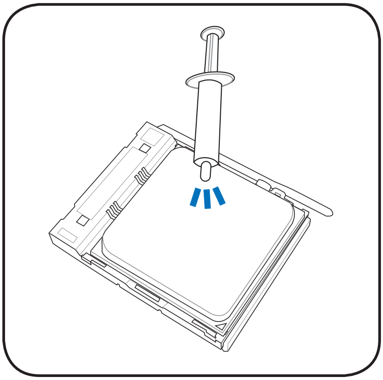
3. Поставете микропроцесора над гнездото, така че ъгълът на микропроцесора със златния триъгълник да пасне в ъгъла на гнездото с малкия триъгълник.
4. Внимателно поставете микропроцесора в гнездото докато не пасне.



5. Когато микропроцесорът е на мястото си, натиснете лостчето на гнездото надолу, за да захванете микропроцесора. Лостчето щраква, за да покаже, че е в заключено положение.



6. Нанесете равномерно тънък слой термопаста върху горната повърхност на процесора, с която ще контактува радиаторът.



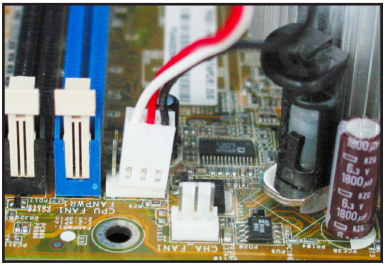
Някои радиатори се доставят с нанесен слой термопаста. В такъв случай пропуснете тази стъпка.

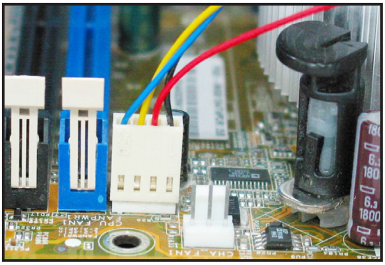
Термопастата е отровна и негодна за ядене. НЕ яжте от нея. Ако попадне в очите или върху кожата ви, измийте я веднага и потърсете професионална медицинска помощ.

1.2 Монтиране на радиатора и вентилатора

За да монтирате радиатора и вентилатора на процесора:

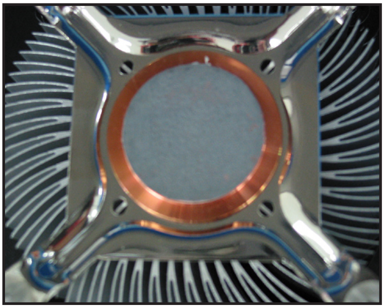
1. Изберете сертифицирани от Intel или AMD радиатор и вентилатор в съответствие с вашата дънна платка. Има 3-пинови (вляво) и 4-пинови (вдясно) конектори на вентилатор. Само вентилаторите за процесор, които имат 4-пинови конектори, поддържат технологията ASUS Q-Fan.





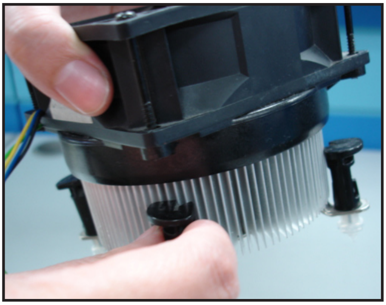
Относно радиаторите, сертифицирани от Intel®:

2. Някои радиатори се доставят с предварително нанесено покритие от термична паста. В такъв случай не я остъргвайте и свалете предпазния слой непосредствено преди монтажа. Ако нямат, преди монтажа на радиатора капнете няколко капки термична паста върху изложената повърхност на процесора, с която радиаторът ще бъде в контакт. Тя трябва да се нанесе на равномерен тънък слой.

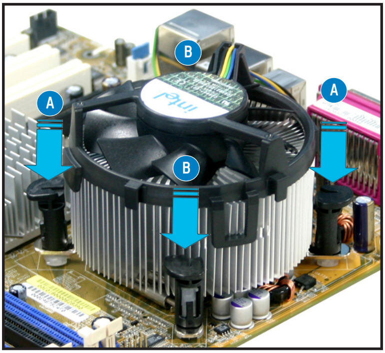


За да предпазите пастата от замърсяване, НЕ я размазвайте директно с пръст.

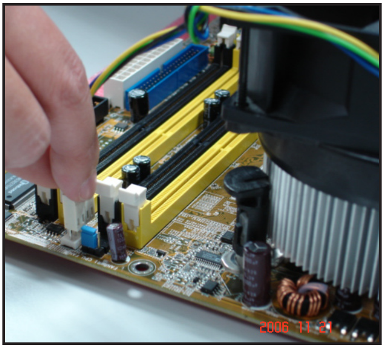
3. Ориентирайте всяка закопчалка така, че тесният край на жлеба да сочи навън.



4. Натиснете две закопчалки едновременно в диагонална последователност, за да закрепите комплекта радиатор-вентилатор на мястото му.



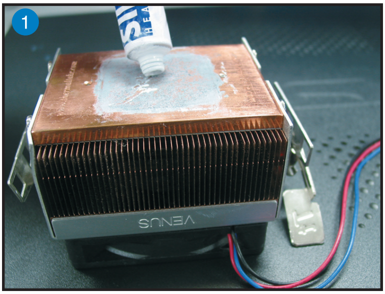
5. Включете кабела на вентилатора в съответния конектор върху дънната платка.

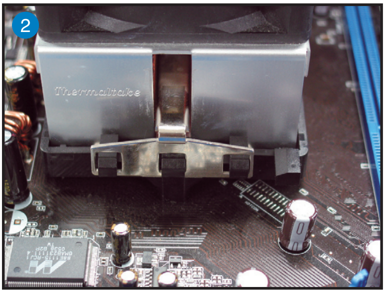


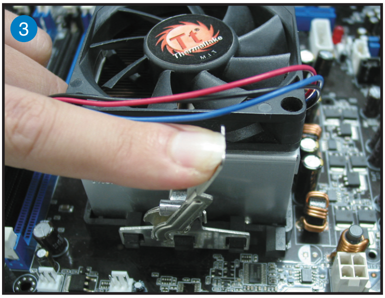
НЕ забравяйте да включите конектора на вентилатора! Може да възникнат грешки при проверка на хардуера, ако не включите този конектор, освен това ви препоръчваме да използвате радиатор, действащ във всички посоки, за да се постигне максимална площ за разсейване на топлината.

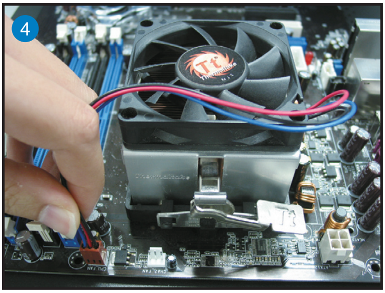
Относно радиаторите, сертифицирани от AMD:

Следвайте инструкциите по-долу, за да монтирате сертифициран от AMD радиатор.







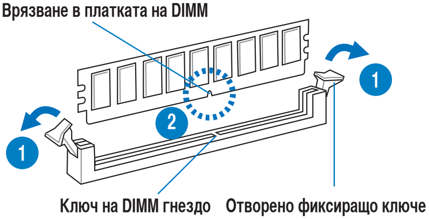


1.3 Монтиране на DIMM

Преди монтиране и демонтиране на DIMM или други компоненти на системата, винаги изключвайте захранващия кабел от контакта. В противен случай е възможно дънната платка и другите компоненти сериозно да се повредят.

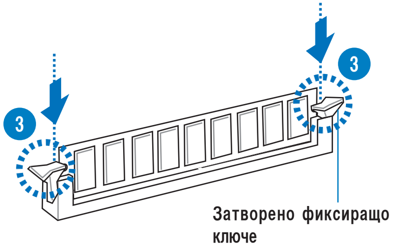
Монтиране на DIMM в слот с две ключета

1. Натиснете навън фиксиращите ключета, за да отворите слота DIMM.
2. Подравнете DIMM модула с гнездото, така че жлебът на DIMM модула да съответства на ключа на DIMM гнездото.



Паметта DIMM има несиметрично врязване и поради това може да се постави в слота само по един начин. НЕ използвайте сила, за да инсталирате DIMM модула в гнездото в неправилна посока; по този начин ще избегнете повреда на DIMM модула.

3. Дръжте DIMM модула с две ръце, след което поставете DIMM модула вертикално в гнездото. Упражнете натиск в двата края на DIMM модула едновременно докато не чуете щракване и DIMM модулът не може да влезе по-навътре в гнездото. Така се гарантира правилното монтиране на DIMM модула.

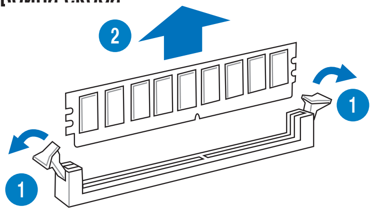


Винаги поставяйте DIMM модула ВЕРТИКАЛНО в гнездото, за да избегнете повреда на жлеба на DIMM модула.

- За да монтирате две или повече памети DIMM, вижте ръководството за потребителя, включено в комплекта на дънната платка.
- В ръководството за потребителя е приведен списък на одобрените доставчици на модули с памет.

Отстраняване на DIMM от DIMM гнездо с двойна скоба

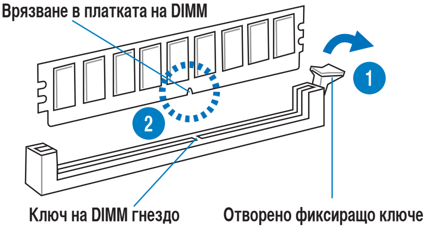
1. Едновременно натиснете предпазните скоби навън, за да отключите DIMM модула.
2. Извадете DIMM модула от гнездото.



Придържайте внимателно DIMM модула докато натискате предпазните скоби. DIMM модулът може да се повреди ако изхвръкне рязко от гнездото.

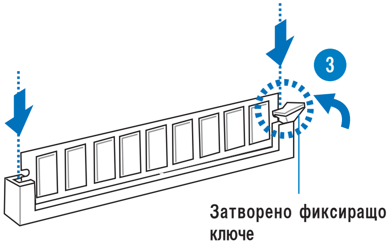
Монтиране на DIMM в слот с едно ключе

1. Натиснете навън фиксиращите ключета, за да отворите слота DIMM.
2. Подравнете DIMM модула с гнездото, така че жлебът на DIMM модула да съответства на ключа на DIMM гнездото.



Паметта DIMM има несиметрично врязване и поради това може да се постави в слота само по един начин. НЕ използвайте сила, за да инсталирате DIMM модула в гнездото в неправилна посока; по този начин ще избегнете повреда на DIMM модула.

3. Дръжте DIMM модула с две ръце, след което поставете DIMM модула вертикално в гнездото. Упражнете натиск в двата края на DIMM модула едновременно докато не чуете щракване и DIMM модулът не може да влезе по-навътре в гнездото. Така се гарантира правилното монтиране на DIMM модула.

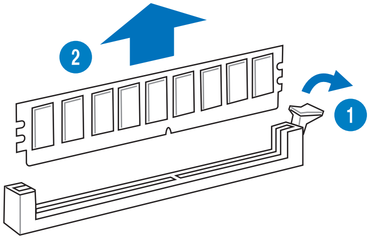


Винаги поставяйте DIMM модула ВЕРТИКАЛНО в гнездото, за да избегнете повреда на жлеба на DIMM модула.

- За да монтирате две или повече памети DIMM, вижте ръководството за потребителя, включено в комплекта на дънната платка.
- В ръководството за потребителя е приведен списък на одобрените доставчици на модули с памет.

Отстраняване на DIMM от DIMM гнездо с единична скоба

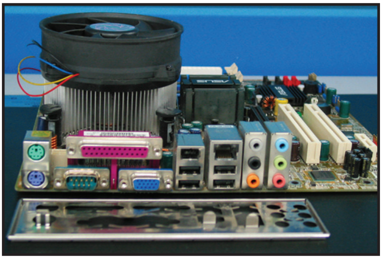
1. Натиснете предпазната скоба навън, за да отключите DIMM модула.
2. Извадете DIMM модула от гнездото.



Придържайте внимателно DIMM модула докато натискате предпазните скоби. DIMM модулът може да се повреди ако изхвръкне рязко от гнездото.

1.4 Монтаж на дънната платка

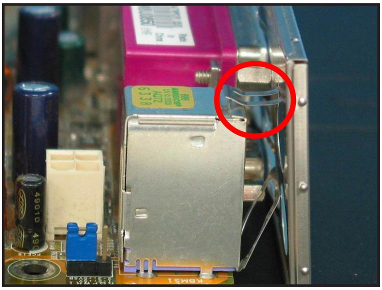
1. В/И портовете са различни при различните дънни платки. Използвайте и монтирайте задния предпазен капак на В/И портовете, който се доставя само в опаковката на дънната платка.



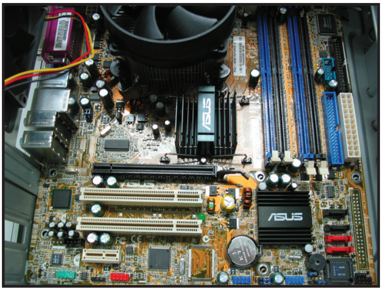
Някои остри ръбове и върхове могат да причинят нараняване. Препоръчваме ви да си поставите ръкавици, устойчиви на срязване и пробиване, преди монтажа на дънната платка и предпазния капак на В/И портовете.

2. Монтирайте опорите в съответните отвори за винтове върху металната плоскост.

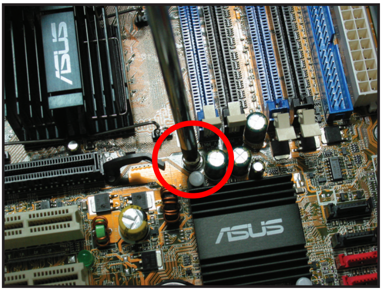
3. Пружините по ръбовете на предпазния капак на В/И портовете може да повредят В/И портовете. Бъдете внимателни при монтаж на предпазния капак на В/И портовете.



4. Позиционирайте дънната платка със страната на В/И портовете към задната част на шасито и поставете дънната платка върху шасито.



5. Поставете и леко затегнете всеки болт, първо в диагонална последователност. След като поставите всички болтове, затегнете ги на ръка.



- Можете да свалите металните капачета на слотовете за допълнителните платки на гърба на шасито, преди да монтирате дънната платка. При някои модели шасита може да бъде трудно да се свалят след монтаж капачетата на слотовете за допълнителни платки.
- НЕ затягайте прекалено болтовете. Това може да повреди дънната платка.

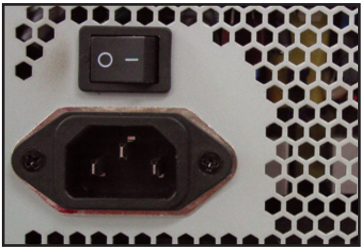
1.5 Монтаж на захранващия блок

Има два вида захранващи блокове, които обикновено се използват. Единият е с активна корекция на фактора на мощността (КФМ), а другият с пасивна КФМ.

1. Изберете захранващ блок.

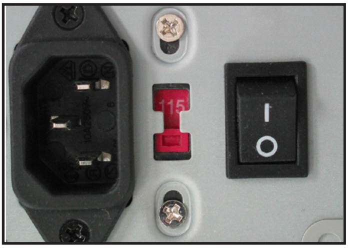
Захранващ блок с пасивна КФМ:

Пасивната КФМ изисква от потребителя ръчно да настрои входното напрежение от мрежата.



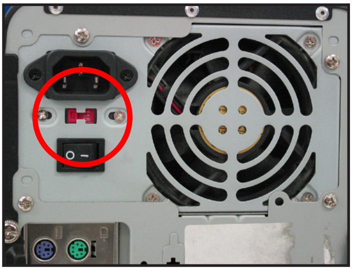
Захранващ блок с активна КФМ:

Активната КФМ автоматично настройва входното напрежение от мрежата.



2. Ако използвате захранващ блок с пасивна КФМ, настройте го на правилното входно напрежение от мрежата във вашия регион.

Ако не настроите захранващия блок на правилното входно напрежение от мрежата, това сериозно може да повреди системата.



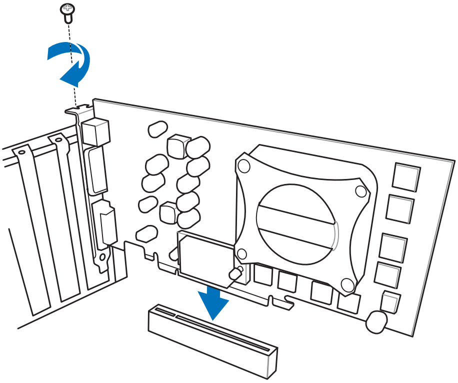
Използвайте само захранващи блокове, сертифицирани за безопасна работа. Използването на нестабилно захранване може да причини повреда на вашата дънна платка и на другите компоненти. Направете справка с ръководството за потребителя относно захранващите блокове, които отговарят на изискванията на дънната платка.

1.6 Инсталиране на допълнителна платка

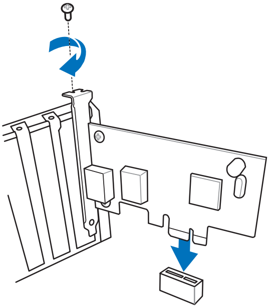
За да инсталирате допълнителна платка:

1. Свалете металното капаче срещу слота за допълнителна платка, в който желаете да инсталирате допълнителната платка.
2. Инсталирайте допълнителната платка и проверете дали е прилегнала добре към слота.
3. Завинтете платката, за да я закрепите към слота.
4. Повторете предишните стъпки, за да инсталирате друга допълнителна платка.

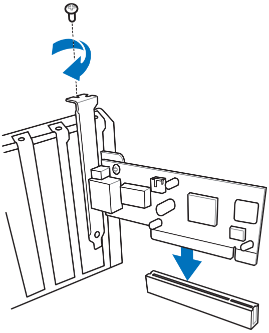
Платка PCIE x16



Платка PCIE x1



PCI платка

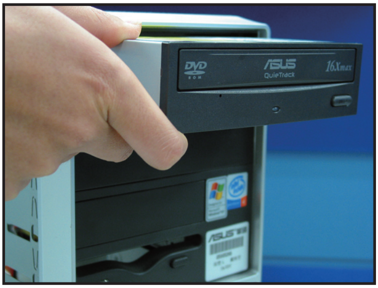


- За подробности по конфигурирането на платката направете справка в документацията на платката и в ръководството за потребителя на дънната платка, в случай че желаете да конфигурирате някои джъмпери след инсталиране на допълнителната платка.
- Направете справка в ръководството за потребителя на дънната платка за указания относно свързването на сигналния кабел на допълнителната платка.

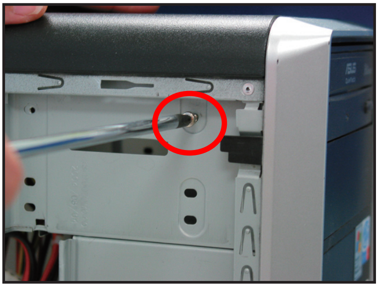
1.7 Монтаж на дисковите устройства

1.7.1 PATA оптично дисково устройство

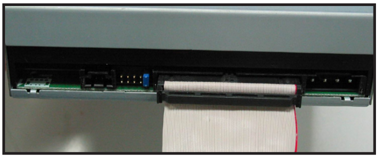
1. Свалете декоративния капак и вкарайте оптичното дисково устройство в носещата платформа.



2. Подравнете отворите за болтове и закрепете дисковото устройство с болтове.

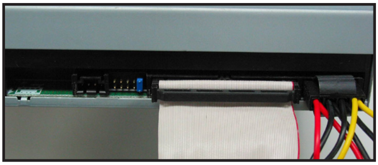


3. Ориентирайте и включете IDE кабела в оптичното устройство. Червената ивица на IDE кабела е от страната на пин 1 и трябва да съвпада с вдлъбнатината, отбелязваща пин 1 върху оптичното устройство.

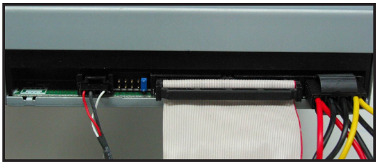


IDE кабелите са защитени от погрешно включване. Никога не включвайте със сила IDE кабел в конектора.

4. Включете 4-пиновия захранващ кабел в оптичното устройство.

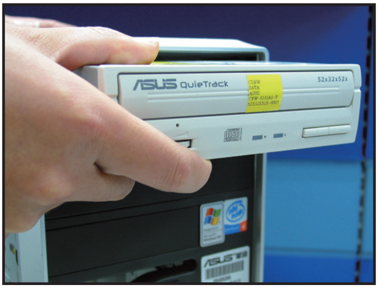


5. Включете аудиокабела към конектора върху оптичното устройство.

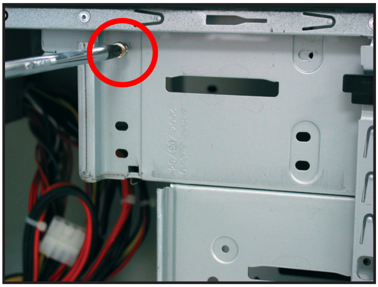


1.7.2 SATA оптично дисково устройство

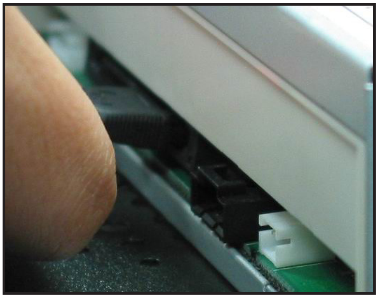
1. Свалете декоративния капак и вкарайте оптичното дисково устройство в носещата платформа.



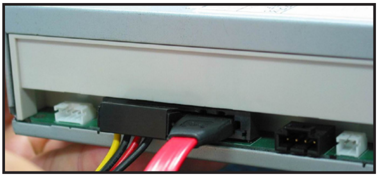
2. Подравнете отворите за болтове и закрепете дисковото устройство с болтове.



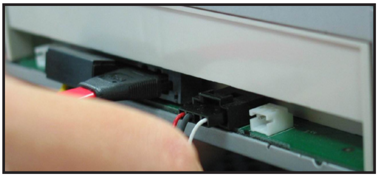
3. Ориентирайте и включете SATA кабела в оптичното устройство. SATA кабелите са защитени от погрешно включване. Никога не включвайте със сила SATA кабел в конектора.



4. Включете захранващия SATA кабел в оптичното устройство.

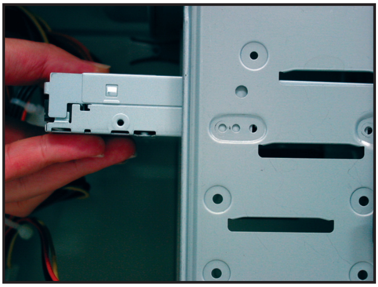


5. Включете аудиокабела към конектора върху оптичното устройство.

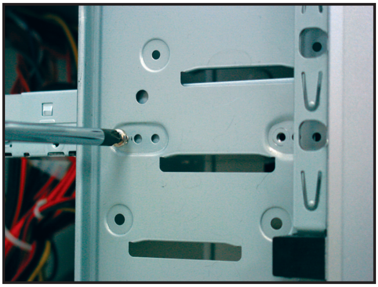


1.7.3 Дискетно устройство

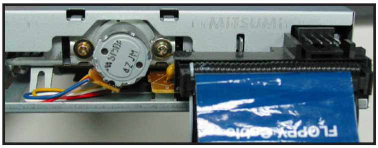
1. Свалете декоративния капак и вкарайте дискетното устройство в носещата платформа.



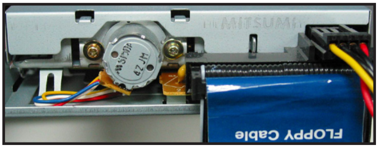
2. Подравнете отворите за болтове и закрепете дисковото устройство с болтове.



3. Ориентирайте и включете интерфейсния кабел на дискетното устройство към дискетното устройство. Червената ивица на кабела е от страната на пин 1 и трябва да съвпада с пин 1 върху дискетното устройство.

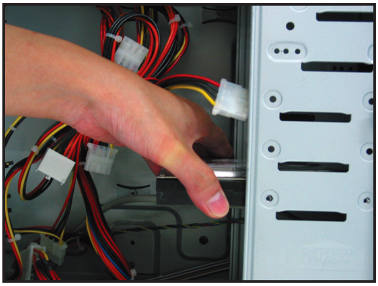


4. Включете захранващия кабел на дискетното устройство към конектора на гърба на дискетното устройство.

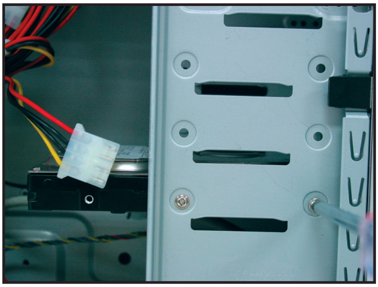


1.7.4 PATA твърд диск

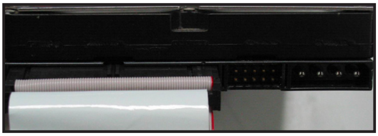
1. Вкарайте PATA твърдия диск в носещата платформа.



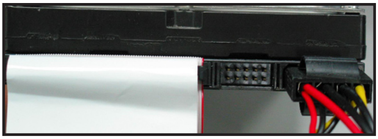
2. Подравнете отворите за болтове и закрепете дисковото устройство с болтове.



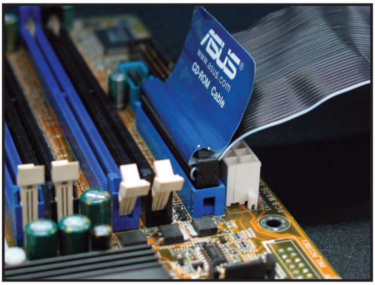
3. Ориентирайте и включете сигналния кабел към твърдия диск. Червената ивица на кабела е от страната на пин 1. Прорезът за предпазване от погрешно включване трябва да съвпада, а включването на кабела в конектора не трябва да става със сила.



4. Включете 4-пиновия захранващ кабел в конектора на гърба на твърдия диск.

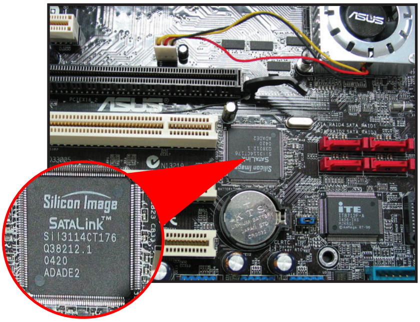


5. Включете другия край на сигналния кабел към съответното гнездо на дънната платка.



Бележки относно инсталиране на PATA твърд диск

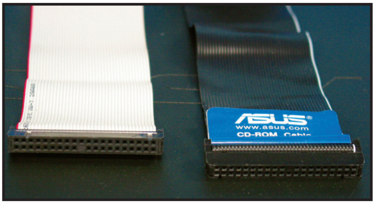
- Ако вашата операционна система е инсталирана на твърдия диск, управляван от RAID или други контролери, на твърдия диск първо трябва да инсталирате драйвер за контролера.


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

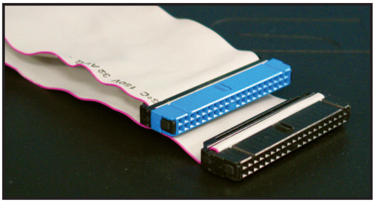
- Конекторът на кабела е обозначен с цветове. Синият е за приемния конектор, а черно-сивият е за първичното/вторичното дисково устройство.

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

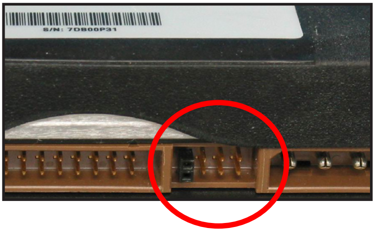
- Има два кабела за ATA IDE дискови устройства, по-новият 80-жилен (вдясно) и по-старият 40-жилен кабел (вляво). За ATA66/100/133 дискови устройства по-добра ефективност може да предложи само 80-жилният кабел. 40-жилните кабели обикновено са за оптичните устройства.



- Кабелите са конструирани с издатини за издърпване. Дисковите устройства се инсталират лесно според етикетите върху кабелите. За предотвратяване на повреда на пиновете изключвайте кабела, като го хващате за издатините за издърпване.

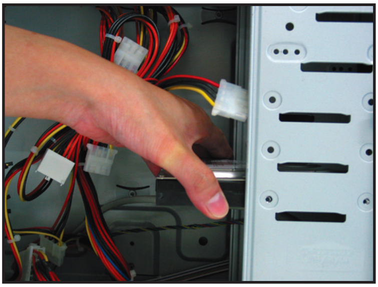


- При свързване на две IDE устройства трябва да настроите джъмперите на различна позиция, единия на главна (master), а другия – на подчинена (slave). Ако използвате 80-жилен кабел, можете да направите избор чрез

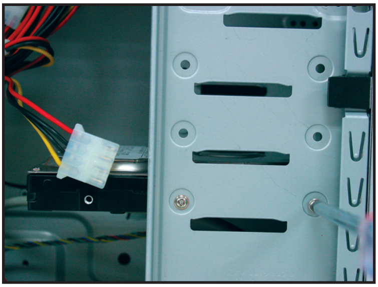

S/N: 7DB00P31

1.7.5 SATA твърд диск

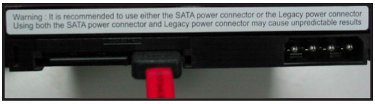
1. Вкарайте SATA твърдия диск в носещата платформа.



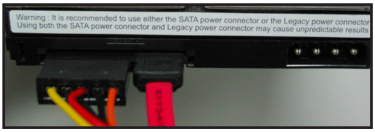
2. Подравнете отворите за болтове и закрепете дисковото устройство с болтове.



3. Ориентирайте и включете SATA кабела към твърдия диск. Кабелът може да се включи само в една посока.

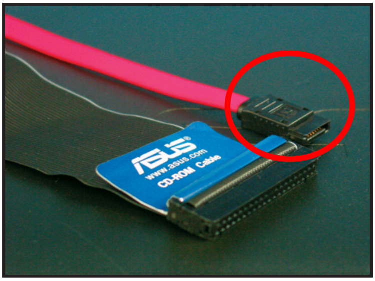

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

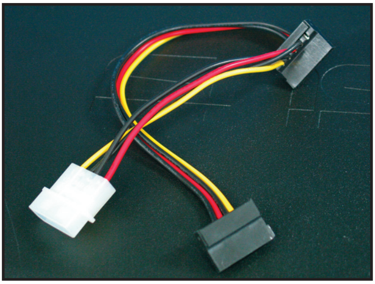
4. Включете SATA захранващия кабел към конектора на гърба на твърдия диск.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Бележки относно инсталирането на SATA твърд диск

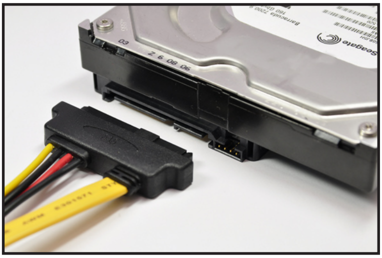
- Серийният ATA (SATA) интерфейс осигурява по-висока скорост на пренос на данни и по-малко отклонение на напрежението от номиналното. Тесният SATA кабел също така решава проблемите с кабелите и дава възможност за по-добра циркулация на въздуха в шасито.
- Конекторът на SATA захранващия кабел е различен от традиционния 4-пинов конектор. В опаковката на дънната платка на ASUS се съдържа адаптерен захранващ кабел за вас, в случай че вашият захранващ блок не включва този нов конектор.


ASUS
www.asus.com
CD-ROM Cable

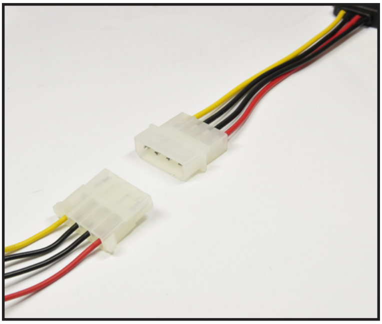


1.7.6 SAS твърд диск

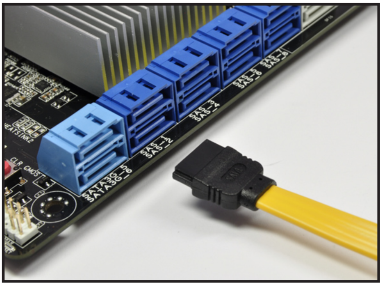
1. Нагласете и свържете комбинирания сигнално-силов кабел SAS към твърдия диск. Кабелът може да се включи само в една посока.



2. Свържете силовия кабел SAS към силовия конектор на захранващия блок.



3. Свържете сигналния кабел SAS към конектора на дънната платка.

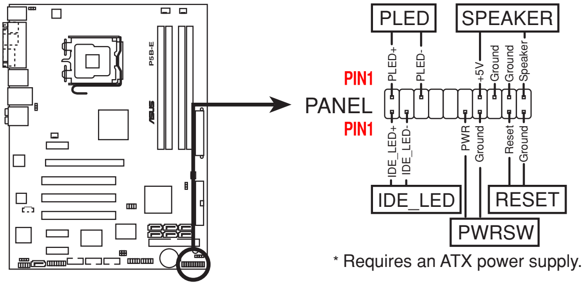

SATA3G_5
SATA3G_6
SAS_1
SAS_2
SAS_3
SAS_4
SAS_5
SAS_6
SAS_7
SAS_8
CLR_CMOS
HEATSINK2

1.8 Кабели на предния панел

За свързване на кабелите на предния панел:

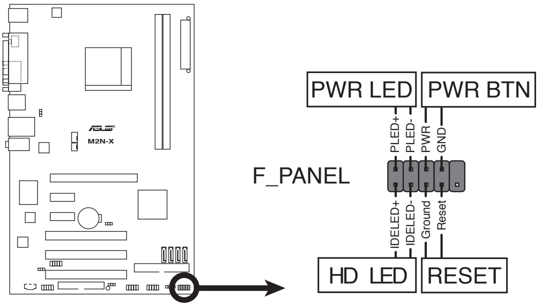
- RESET (бутон за рестарт)
- PLED (светодиод на захранването)
- PWRSW (ключ на захранването)
- IDE_LED (активен светодиод на IDE твърд диск)
- SPEAKER (конектор за говорителя)

20-8 пинов конектор на предния панел


P5B-E
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

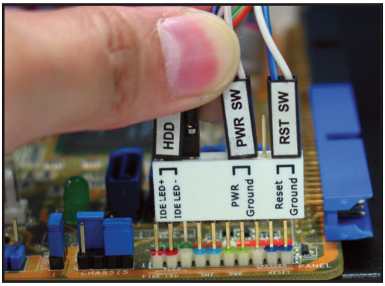
10-1 пинов конектор на предния панел


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Кабелите на предния панел на вашето шаси може да се различават според моделите и дизайна. Свържете тези конектори към дънната платка в съответствие с надписа.
- Ако светодиодите не светват и мястото на пиновете е правилно, може би сте разменили заземителните пинове и сигналните пинове. Обикновено белият проводник е свързан със заземителния пин, а цветните проводници – със сигналните пинове
- Кабелите SPEAKER (говорител), RESET (рестарт) и PWRSW (ключ на захранването) на предния панел нямат определена ориентация, а кабелите IDE_LED (IDE светодиод) и PLED (светодиод на захранването) имат. Свържете пин 1 на кабела с пин 1 на дънната платка.
- Конекторът на предния панел варира според модела на вашата дънна платка, за повече информация направете справка с ръководството за потребителя.

Q-конектор на ASUS

Едностъпковата инсталация на Q-конектора на ASUS ви спестява усилия и време за включване на обърканите кабели на предния панел. За подробности направете справка с ръководството за потребителя.

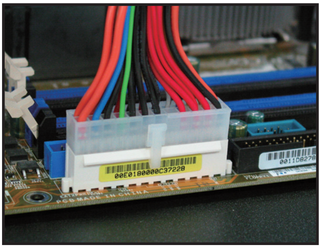


С Q-конектор са снабдени избрани модели. За подробности направете справка в ръководството за потребителя.

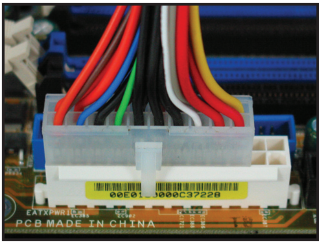
1.9 Свързване на ATX захранване

Конекторите на ATX захранването могат да се включват ориентирани само в една посока. Използвайте страничните скоби за закачване на конекторите към дънната платка. НЕ прилагайте сила върху мъжките конектори за захранване, когато ги включвате в женските им съответствия върху дънната платка. Обикновено върху дънната платка има два конектора за захранване – 24-пинов и 4-пинов конектор. Някои по-стари захранващи блокове може да имат 20-пинови конектори, които също могат да се включат в 24-пиновия конектор върху дънната платка.

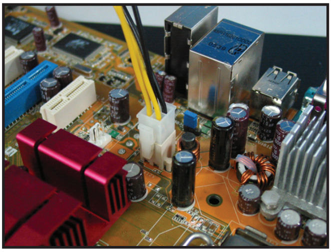
24-пинов конектор за захранване



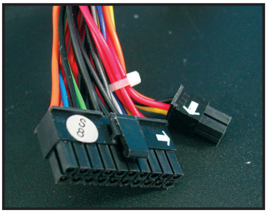
20-пинов конектор за захранване (в 24-пиново женско съответствие)

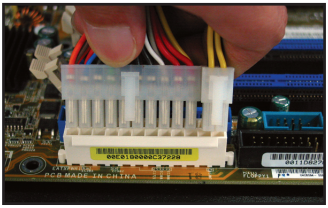


4-пинов конектор за захранване



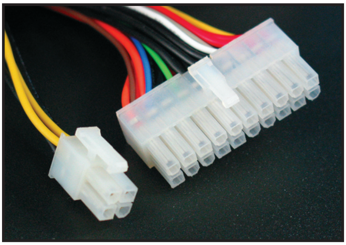
- НЕ включвайте външното захранване от ел. мрежата, когато свързвате конекторите за захранване към дънната платка.
- Конекторите за захранване трябва да бъдат включени здраво към дънната платка.
- Ако вашият захранващ блок поддържа 20-пинов+4-пинов конектор, можете да комбинирате тези два конектора и да ги включите в 24-пиновия конектор върху дънната платка.



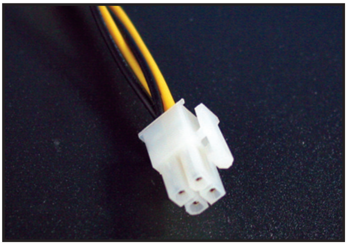


Конектори за захранване

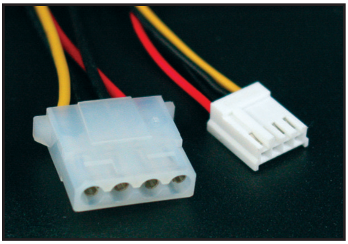
20+4 (24)-пинов ATX конектор



4-пинов ATX конектор

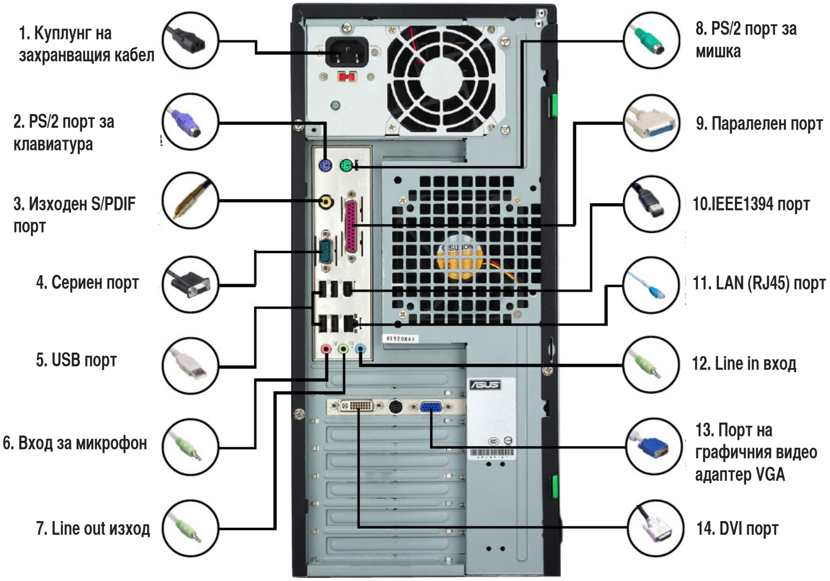


конектор за захранване на периферия (вляво)
конектор за захранване на дискетн о устройство (вдясно)



1.10 Периферни устройства и принадлежности

За свързване на периферните устройства и принадлежности направете справка с фигурата по-долу:


1. Куплунг на захранващия кабел
2. PS/2 порт за клавиатура
3. Изходен S/PDIF порт
4. Сериен порт
5. USB порт
6. Вход за микрофон
7. Line out изход
8. PS/2 порт за мишка
9. Паралелен порт
10.IEEE1394 порт
11. LAN (RJ45) порт
12. Line in вход
13. Порт на графичния видео адаптер VGA
14. DVI порт

1. Куплунг на захранващия кабел + захранващ кабел

2. PS/2 порт за клавиатура + клавиатура

3. Изходен S/PDIF порт + дигитална система 5.1 тонколони

4. Сериен порт + PDA док

5. USB порт + USB устройства

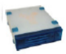
6. Вход за микрофон + микрофон

7. Line out изход + тонколони

8. PS/2 порт за мишка + мишка

9. Паралелен порт + принтер

10. IEEE1394 порт + външен твърд диск



11. LAN (RJ45) порт + модем

12. Line in вход + касетофон

13. VGA порт + CRT монитор

14. DVI порт + LCD монитор

Конекторите на задния панел варират в зависимост от моделите. За подробности направете справка с ръководството за потребителя.

1.11 Стартиране за пръв път

Системата изпълнява самотестове при включване на захранването (power-on self tests – POST). Докато тестовете се изпълняват, BIOS издава звукови сигнали (вижте таблицата със звуковите сигнали на BIOS, дадена по-долу)

Звуков сигнал на BIOS	Описание
Един продължителен звуков сигнал, последван от три кратки звукови сигнала	Няма намерен VGA
Един продължителен звуков сигнал, последван от два кратки звукови сигнала, а след това пауза (повтаря се)	Няма намерена памет
Един продължителен звуков сигнал, последван от четири кратки звукови сигнала	Повреда в хардуерен компонент (AMI BIOS)
Четири кратки звукови сигнала	Повреда в хардуерен компонент (AWARD BIOS)

Откриване и отстраняване на проблеми

Проблем	Действие
• Компютърът не може да се включи • Светодиодът на захранването не свети. • Вентилаторът на захранването не работи.	Проверете дали захранващият кабел е включен правилно.
Компютърът е включен, но мониторът е черен.	• Проверете дали захранването на монитора е включено и дали VGA кабелът е свързан правилно. • Регулирайте яркостта и контраста на монитора. • Изключете компютъра, а след това изключете захранващия кабел. Проверете дали VGA платката е инсталирана добре в слота.
Няма намерена памет	• Проверете дали модулът памет е правилен. • Проверете дали DIMM паметите са прилегнали добре в DIMM слотовете. • Проверете дали модулът памет е от продавач, включен в списъка на квалифицираните продавачи. Вижте ръководството за потребителя за този списък (QVL).
Грешка на дискетното устройство (индикаторът свети непрекъснато или на екрана се появява предупредително съобщение).	• Проверете BIOS конфигурацията на дискетното устройство. • Проверете дали кабелът за дисковото устройство е включен правилно.
Грешка на твърдия диск/ оптичното дисково устройство (не е разпознато или не е намерено)	• Проверете дали настройката на джъмперите е правилна (Главен (Master)/подчинен (Slave)) • Проверете BIOS конфигурацията на твърдия диск/оптичното дисково устройство. • Проверете дали кабелите на устройството са включени здраво. • Проверете дали са инсталирани драйверите на устройствата.

Глава 2: Управление/актуализация на BIOS

2.1 Помощна програма AFUDOS

Помощната програма AFUDOS ви позволява да актуализирате BIOS файла в среда на DOS, като използвате системна дискета с актуализирания BIOS файл. Тази помощна програма също така ви позволява да копирате текущия BIOS файл, който можете да използвате като резервно копие, в случай че BIOS не успее да се актуализира или се повреди по време на процеса на актуализация.

Копиране на текущия BIOS

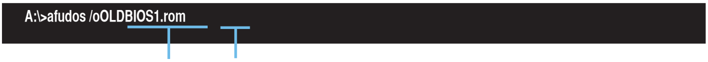
За да копирате текущия BIOS файл, като използвате помощна програма AFUDOS:

- Проверете дали дискетата не е защитена срещу запис и дали има поне 1024 KB свободно пространство, за да се съхрани файлът.
- Показаните по-долу екрани на BIOS са само за справка. Действителните показания на BIOS екрана може да не бъдат същите като показаните.

1. Копирайте помощната програма AFUDOS (afudos.exe) от DVD диска за поддръжка на дънната платка върху системна дискета, която сте създали предварително.
2. Заредете системата в режим на DOS и после след DOS- промпта напишете:

   afudos /o[filename]

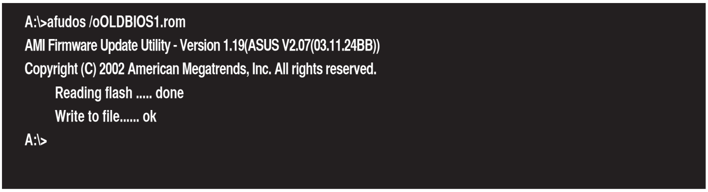
   където [filename] е всяко зададено от потребителя име на файл с дължина не повече от 8 цифрово-буквени знака за главното име и три цифрово-буквени знака за разширението на името.



```
A:\>afudos /oOLDBIOS1.rom
```

Главно име на файла **Разширение**

3. Натиснете <Enter>. Помощната програма копира текущия BIOS файл върху дискетата.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

Помощната програма ви връща към DOS-промпта след копиране на текущия BIOS файл.

Актуализиране на BIOS файла

За да актуализирате BIOS файла, като използвате помощната програма AFUDOS:

1. Посетете уебсайта на ASUS (www.asus.com) и изтеглете актуалния BIOS файл за дънната платка. Съхранете BIOS файла на системна дискета.

Запишете си името на BIOS файла на хартия. След DOS-промпта трябва да напишете точно името на BIOS файла.

2. Копирайте помощната програма AFUDOS (afudos.exe) от DVD диска за поддръжка на дънната платка върху системна дискета, която сте създали предварително.
3. Заредете системата в режим на DOS и после след DOS-промпта напишете:

   afudos /i[filename]

   където [filename] е името на актуалния или на оригиналния BIOS файл върху системната дискета.

```
A:\>afudos /iP5K3D.ROM
```

4. Помощната програма проверява файла и започва актуализацията на BIOS.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Запишете си името на BIOS файла на хартия. След DOS-промпта трябва да напишете точно името на BIOS файла.

5. Помощната програма ви връща към DOS-промпта, след като процесът на актуализация на BIOS завърши. Презаредете системата от твърдия диск.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Помощна програма Award BIOS Flash Utility

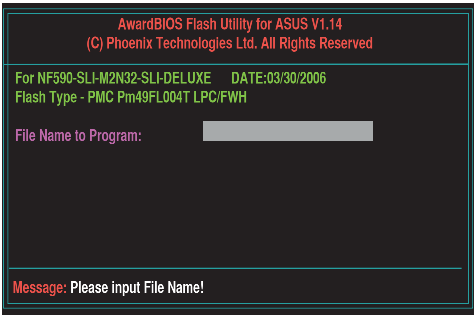
Актуализиране на BIOS

Базовата входно-изходна система (BIOS) може да се актуализира, като използвате помощната програма AwardBIOS Flash Utility. Следвайте указанията по-долу, за да актуализирате BIOS, като използвате тази помощна програма:

1. Изтеглете актуалния BIOS файл от уебсайта на ASUS. Преименувайте файла на M2N32SLI.BIN и го съхранете на дискета, CD ROM или USB флашдиск, **форматиран с FAT 16/12.**

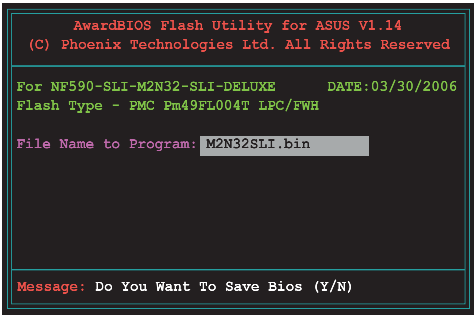
Съхранете само актуалния BIOS файл, за да избегнете зареждане на погрешен BIOS файл.

2. Копирайте AwardBIOS Flash Utility (awdflash.exe) от папка Software на CD диска за поддръжка върху дискетата, CD ROM или USB флашдиска с актуалния BIOS файл.
3. Заредете системата в режим на DOS, като използвате системна дискета, CD ROM или USB флашдиск, които сте създали предварително.
4. В режим на DOS използвайте <X:> (X означава зададеното име на диска), за да преминете в папката или дискетата, CD ROM или USB флашдиска, където сте съхранили BIOS файла и AwardBIOS Flash Utility.
5. След промпта напишете awdflash, а след това натиснете <Enter>. Появява се екранът на AwardBIOS Flash Utility.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

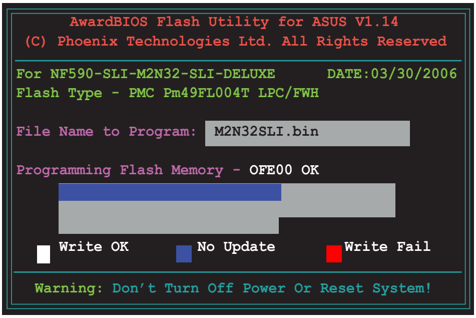
6. Напишете името на BIOS файла в поле File Name to Program, а след това натиснете <Enter>.



```
   AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Натиснете <N>, когато помощната програма ви подсети да съхраните текущия BIOS файл. Появява се следният екран.

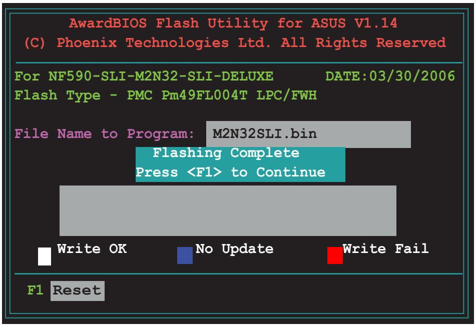
8. Програмата проверява BIOS файла върху дискетата, CD ROM или USB флашдиска, и започва да програмира флашпаметта с BIOS файла.



```
   AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

НЕ изключвайте и НЕ презареждайте системата по време на процеса на програмиране на флашпаметта!

9. Помощната програма извежда на екрана съобщението Flashing Complete, което означава успешно завършване на програмирането на флашпаметта с BIOS файла. Извадете диска, а след това натиснете <F1>, за да се рестартира системата.



```
   AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                Flashing Complete
              Press <F1> to Continue

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

  F1 Reset
```

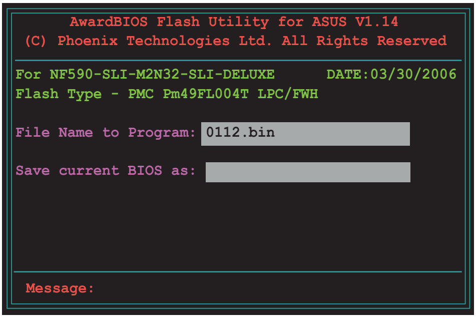
Съхраняване на текущия BIOS файл

Можете да използвате AwardBIOS Flash Utility, за да съхраните текущия BIOS файл. Можете да заредите текущия BIOS файл, в случай че BIOS файлът се повреди по време на процеса на програмиране на флашпаметта.

Проверете дали дискетата, CD ROM или USB флашдискът имат достатъчно пространство за съхранение на файла.

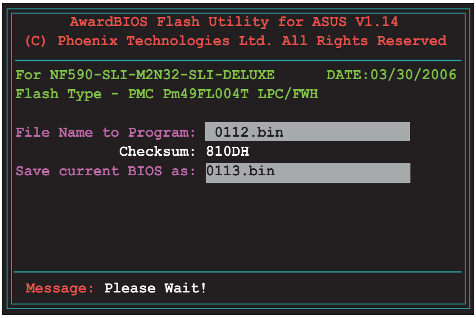
За да съхраните текущия BIOS файл, като използвате AwardBIOS Flash Utility:

1. Следвайте стъпки от 1 до 6 от предишния раздел.
2. Натиснете <Y>, когато помощната програма ви подсети да съхраните текущия BIOS файл. Появява се следният екран:



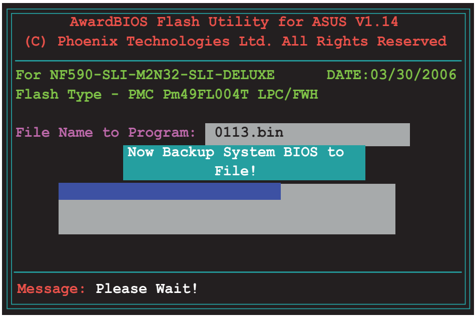
```
      AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Напишете име за текущия BIOS файл в поле Save current BIOS as (съхрани текущия BIOS като), а след това натиснете <Enter>.



```
      AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. Помощната програма съхранява текущия BIOS файл върху диска, а след това се връща към процеса на програмиране на флашпаметта с BIOS.



```
      AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
             Now Backup System BIOS to
                       File!

Message: Please Wait!
```

2.3 Помощна програма ASUS Update

Програмата ASUS Update е помощна програма, която ви позволява да управлявате, съхранявате и актуализирате BIOS на дънната платка в среда на Windows®. Помощната програма ASUS Update ви позволява да:

- Съхранявате текущия BIOS файл
- Изтегляте актуалния BIOS файл от Интернет
- Актуализирате BIOS от актуализиран BIOS файл
- Актуализирате BIOS директно от Интернет
- Виждате информация за версията на BIOS.

Тази помощна програма се съдържа в DVD за поддръжка, намиращ се в опаковката на дънната платка.

ASUS Update изисква интернетвръзка или през мрежа, или през доставчик на услуга за интернетдостъп (ISP).

Инсталиране на ASUS Update

За да инсталирате ASUS Update:

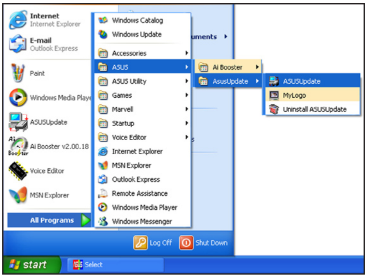
1. Поставете DVD за поддръжка в оптичното устройство. Появява се меню Drivers.
2. От менюто **Main (Главно меню)**, щракнете върху раздел Utilities, а след това щракнете върху Install ASUS Update VX.XX.XX.
3. Помощната програма ASUS Update се копира във вашата система.

Актуализиране на BIOS през Интернет

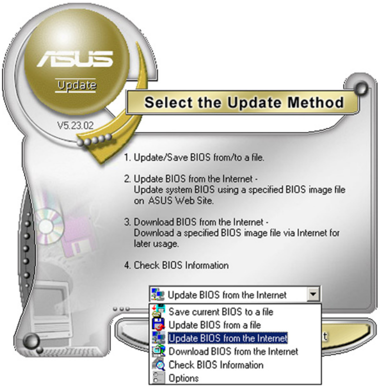
Затворете всички Windows® приложения, преди да актуализирате BIOS с тази помощна програма.

За да актуализирате BIOS през Интернет:

1. От работния плот на Windows®, като щракнете върху **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate**. Появява се главният прозорец на ASUS Update.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Playe
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
uments
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

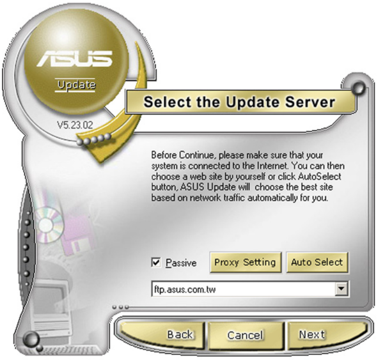
2. Изберете **Update BIOS from the Internet (Актуализирай BIOS от интернет)** от падащото меню и натиснете **Next (Напред)**.


Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Изберете най-близкия до вас FTP сайт на ASUS, за да избегнете мрежовия трафик, или щракнете върху **Auto Select**. Щракнете върху **Next**.


Update
V5.23.02
Select the Update Server

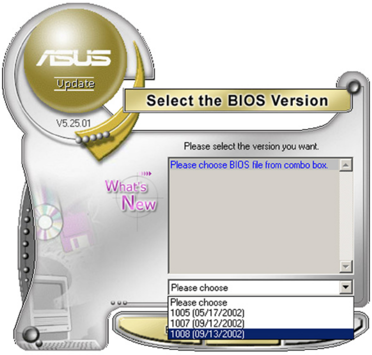
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. От FTP сайта изберете версията на BIOS, която желаете да изтеглите. Щракнете върху **Next**.


Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

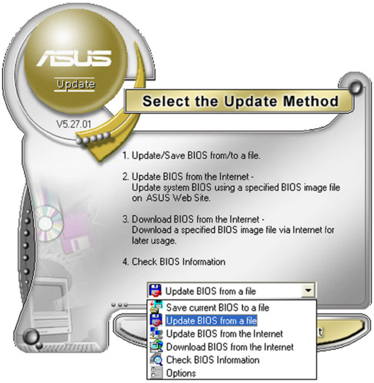
5. Следвайте указанията от екрана, за да завършите процеса на актуализация.

Помощната програма ASUS Update има възможност да се самоактуализира през Интернет. Винаги актуализирайте помощната програма, за да се възползвате от всичките й възможности.

Актуализиране на BIOS чрез BIOS файл

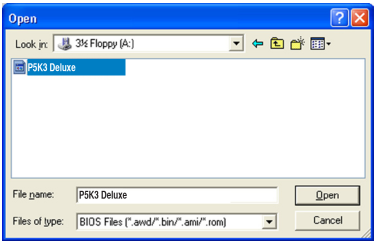
За да актуализирате BIOS чрез BIOS файл:

1. От работния плот на Windows®, като щракнете върху **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate.** Появява се главният прозорец на ASUS Update.
2. Изберете **Update BIOS from a file (Актуализирай BIOS от файл)** от падащото меню и натиснете **Next (Напред)**.


ASUS
Update
V5.27.01
Select the Update Method
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

3. Намерете BIOS файла от прозореца Open (отвори), а след това щракнете върху **Open**.
4. Следвайте указанията от екрана, за да завършите процеса на актуализация.


Open
P5K3 Deluxe
Open
Cancel

Look in: 3½ Floppy (A:)

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Уверете се, че сте заредили настройките по подразбиране на BIOS, за да гарантирате съвместимостта и стабилността на системата. Изберете опцията **Load Setup Defaults (Зареди настройки по подразбиране)** под менюто **Exit (Изход)**.

2.4 Програма на ASUS за актуализация на BIOS

ASUS BIOS Updater (Програма за актуализиране на BIOS) Ви дава възможност да актуализирате BIOS в DOS среда. Тази помощна програма също Ви дава възможност да копирате текущия BIOS файл и да го използвате като архивно копие в случай, че BIOS-ът престане да функционира или бъде повреден по време на процеса на актуализация.

Следващите снимки на екраните на програмата са само за справка. Възможно е действителните екрани на програмата да не са същите като показаните.

Преди да актуализирате BIOS

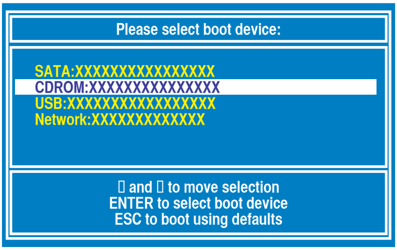
1. Подгответе помощния DVD диск на дънната платка и USB флаш устройство във FAT32/16 формат и с един дял.
2. Изтеглете последния BIOS файл и BIOS Updater (Програма за актуализация на BIOS) от страницата на ASUS http://support.asus.com и го запазете на USB флаш устройство.

- NTFS не се подържа в DOS среда. Не запазвайте BIOS файла и BIOS Updater (Програма за актуализация на BIOS) на твърд диск или USB флаш устройство в NTFS формат.
- Не записвайте BIOS файла на дискета, защото дискетата е с ограничен капацитет.

3. Изключете компютъра и изключете всички твърди дискове SATA (като опция).

Зареждане на системата в DOS среда

1. Включете USB флаш диска с последния BIOS файл и BIOS Updater (Програма за актуализация на BIOS) в USB порта.
2. Заредете системата на компютъра си. Когато се появи логото на ASUS, вижте <F8>, за да отворите **BIOS Boot Device Select Menu (Меню за избор на устройство за зареждане на BIOS)**. Поставете помощния DVD диск в оптичното устройство и изберете оптичното устройство за зареждане на системата.

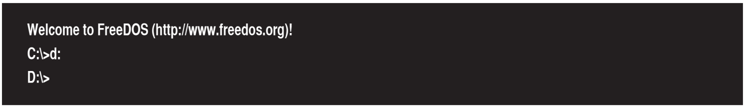


Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

□ and □ to move selection
ENTER to select boot device
ESC to boot using defaults

3. Когато се появи **Make Disk (Създай диск)**, изберете опцията **FreeDOS command prompt (FreeDOS команден прозорец)** като натиснете цифрата на опцията.
4. В командния прозорец FreeDOS, въведете **d:** и натиснете <Enter>, за да привключите от Drive C (оптично устройство) на Drive D (USB флаш устройство).



```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Архивиране на BIOS

За да архивирате текущия BIOS файл, използвайте BIOS Updater (Програма за актуализация на BIOS).

Уверете се, че USB флаш дискът не е защитен и че на него има достатъчно свободно пространство за запазване на файла.

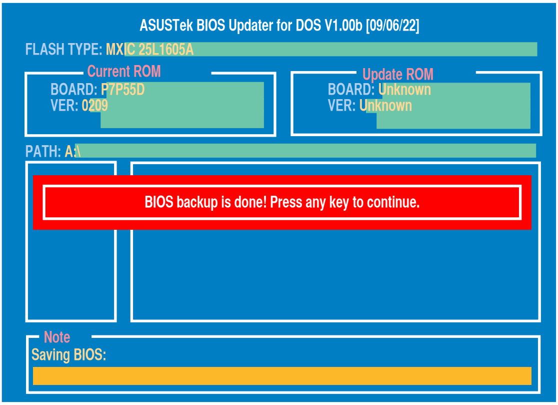
1. В командния прозорец FreeDOS въведете **bupdater /o[filename] (Име на файл)** и натиснете <Enter>.

```
D:\>bupdater /oOLDBIOS1.rom
```

Име на файл **Разширение**

[filename] (Име на файл) е името на файла, зададено от потребителя. Името на основния файл се състои от не повече от 8 цифри и/или букви, а удължението - от три цифри и/или букви.

2. Появява се прозорецът за създаване на архивно копие на BIOS Updater (Програма за актуализация на BIOS), за да покаже, че протича архивиране на BIOS-а. Когато архивирането на BIOS-а приключи, натиснете произволен клавиш, за да се върнете в прозореца на DOS.



ASUSTek BIOS Updater for DOS V1.00b [09/06/22]

FLASH TYPE: MXIC 25L1605A

Current ROM
BOARD: P7P55D
VER: 0209

Update ROM
BOARD: Unknown
VER: Unknown

PATH: A:\

BIOS backup is done! Press any key to continue.

Note
Saving BIOS:

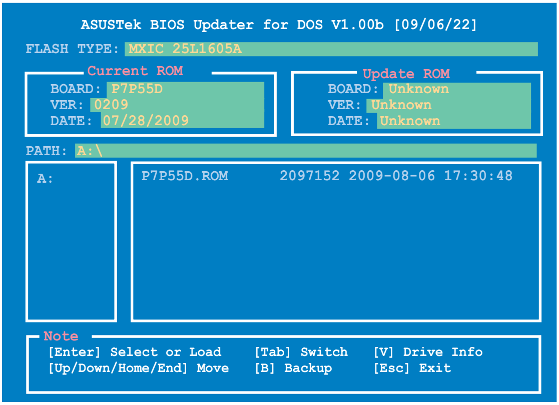
Актуализиране на BIOS файл

Актуализиране на BIOS файла с помощта BIOS Updater (Програма за актуализация на BIOS)

1. В командния прозорец FreeDOS въведете **bupdater /pc /g** и натиснете <Enter>.

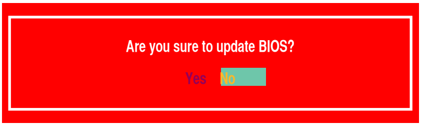
```
D:\>bupdater /pc /g
```

2. BIOS Updater (Програма за актуализация на BIOS) се появява на екрана, както е показано по-долу.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
      Current ROM                         Update ROM
  BOARD: P7P55D                       BOARD: Unknown
  VER: 0209                           VER: Unknown
  DATE: 07/28/2009                    DATE: Unknown
PATH: A:\
  A:          P7P55D.ROM      2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load     [Tab] Switch    [V] Drive Info
  [Up/Down/Home/End] Move    [B] Backup      [Esc] Exit
```

3. Натиснете <Tab>, за да превключите между полетата и използвайте клавишите <Up (Нагоре)/Down (Надолу)/Home (Начало)/End (Край)>, за да изберете BIOS файла и натиснете <Enter>. BIOS Updater (Програма за актуализация на BIOS) проверява избрания BIOS файл и иска от Шас да потвърдите BIOS актуализацията.



Are you sure to update BIOS?

4. Изберете **Yes (Да)** и натиснете <Enter>. Когато актуализацията на BIOS-а приключи, натиснете <ESC>, за да излезете от BIOS Updater (Програма за актуализация на BIOS). Рестартирайте компютъра си.

НЕ изключвайте и не рестартирайте системата по време на актуализацията на BIOS-а, за да избегнете повреда при зареждане на системата.

- За BIOS Updater (Програма за актуализация на BIOS), версия 1.04 или по-нова, помощната програма автоматично ще напусне DOS прозореца след като актуализацията на BIOS-а приключи.
- Уверете се, че сте заредили настройките по подразбиране на BIOS, за да гарантирате съвместимостта и стабилността на системата. Изберете опцията **Load Setup Defaults (Зареди настройки по подразбиране)** под менюто на BIOS **Exit (Изход)**. Вижте глава 3 в ръководството на потребителя на Вашата дънна платка за повече информация.
- Уверете се, че сте свързали всички твърди дискове SATA, след като актуализарате BIOS файла в случай, че са били отстранени.

Глава 3: Откриване и отстраняване на проблеми

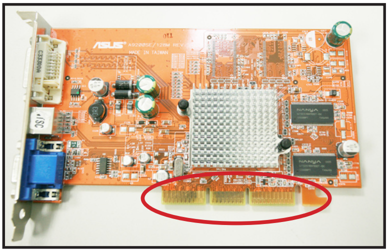
3.1 Откриване и отстраняване на проблеми приинсталирана от потребителя дънна платка

След като сглобите сами своя компютър, можете да се сблъскате с проблеми при стартирането му. Тази глава дава отговори на някои най-често срещани въпроси относно вашия персонален компютър преди зареждане на операционната система. Прочетете тази глава за откриването и отстраняването на основните проблеми. Тя ви спестява време и усилия за разговори с екипа за техническа поддръжка на ASUS или за връщане на продукта за гаранционен сервиз.

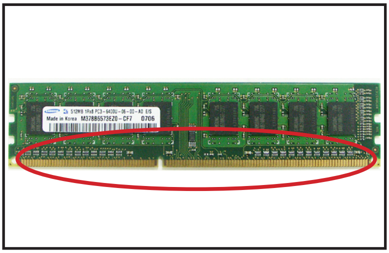
3.1.1 Откриване и отстраняване на основни проблеми

A. Лоша връзка

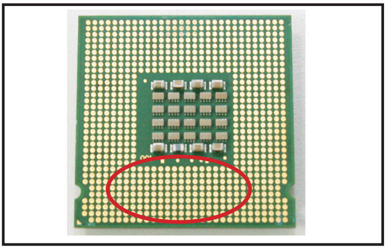
1. Проверете дали златните контакти или пиновете не са замърсени.
2. Използвайте памучен тампон или гума за триене и внимателно изтъркайте златните контакти. Не забравяйте да изчеткате трохите от гумата.



Златни контакти на VGA платка



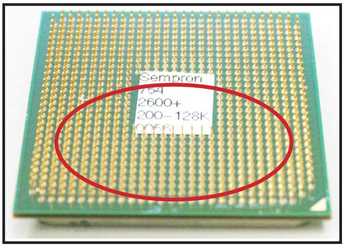
Златни контакти на DIMM



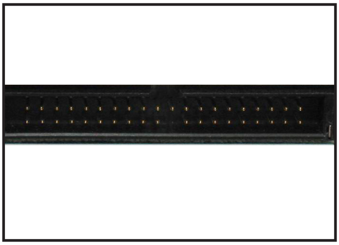
Златни контактни точки на LGA775 процесор

Хващайте платката или процесора за техните ръбове и НЕ докосвайте златните контакти. Статичното електричество може сериозно да повреди устройството.

3. Проверете дали няма счупени или огънати пинове на вашия конектор или на процесора. Счупен или огънат пин може да причини повреда на компонента. Свържете се с продавача, за да потърсите съдействие.



Златни пинове на AMD процесор

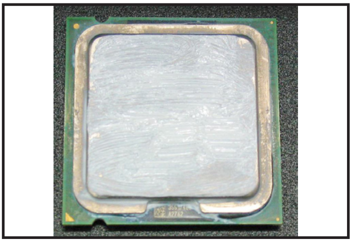


Пинове на конектор

Ако счупването или огъването на пиновете е предизвикано след закупуването, продавачът може да поиска такса за поправката. Понякога счупените или огънати пинове НЕ МОГАТ ДА СЕ ПОПРАВЯТ.

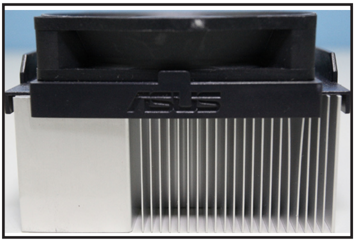
B. Прегряване на процесора

1. Почистете повърхността на процесора с чист парцал. Капнете няколко капки термична паста върху изложената повърхност на процесора, с която радиаторът ще бъде в контакт. Тя трябва да се нанесе на равномерен тънък слой.

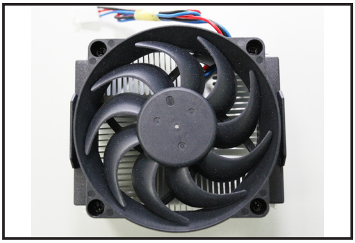


Повърхността на процесора

2. Върху радиатора и вентилатора не трябва да има замърсители.



Поглед към радиатора и вентилатора отстрани



Поглед към радиатора и вентилатора отгоре

3. Следвайте указанията на производителите на радиатора и вентилатора за почистване на замърсителите, които забавят въртенето на вентилатора.

3.2 Други често срещани проблеми

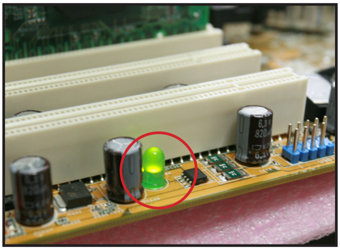
- Когато изваждате устройства от системата, проверете дали всички захранващи кабели са изключени.
- Всички съобщения за грешки ще се покажат на екрана по време на самотеста при включване на захранването (POST).
- Ако има звукови сигнали от BIOS, направете справка с раздел 1.11 за подробности.
- За по-подробна проверка прегледайте справочната таблица по-долу:

	Точки за проверка					
	Светодиод захранване	**Показание на екрана**	**Радиатор и вентилатор**	**Звуков сигнал от BIOS**	**Съобщение за грешка**	**Страница за справка**
Няма захранване	Изкл.	Не	Спрял	Не	–	3-4
На екрана не се показва нищо	Вкл.	Не	Спрял	Не	–	3-5
	Вкл.	Не	Работи	Не	–	3-5
	Вкл.	Не	Работи	Да	–	3-5
Не може да се зареди ОС	Вкл.	Да	Работи	Да	Да	3-5
	Вкл.	Да	Работи	Не	Да	3-5
	Вкл.	Да	Работи	Не	Не	3-5

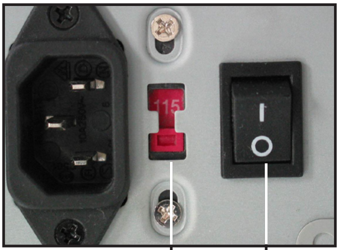
Ако проблемът бъде отстранен, но възникне нов, отново прегледайте справочната таблица. Ако проблемът остава, обърнете се за помощ към продавача или към екипа на ASUS за техническа поддръжка.

3.2.1 Няма захранване

Дънните платки на ASUS са оборудвани със светодиод за индикация на захранването. Светодиодът светва, за да покаже, че системата е включена. Ако светодиодът остане загаснал, следвайте указанията по-долу, за да отстраните проблема.



1. Проверете дали захранващият блок е настроен правилно на входното напрежение от ел. мрежата във вашия регион, както и дали захранването е включено.

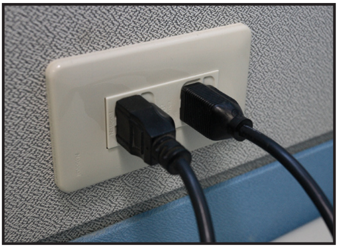


Превключвател за входното напрежение

Ключ на захранването: “—”: вкл.; “O”: изкл.

- Преди да настроите входното напрежение от ел. мрежата, трябва да изключите щепсела на захранващия кабел от контакта. В противен случай може сериозно да се повреди захранващият блок.
- Ако не настроите захранващия блок на правилното входно напрежение от ел. мрежата, това сериозно ще повреди системата.

2. Проверете дали сте включили захранващия кабел в стенния контакт.
    - Включете щепсела на захранващия кабел директно в стенния контакт. НЕ го включвайте в разклонител, непрекъсваемо захранване (UPS) или други устройства.
    - Разменете захранващите кабели на системата и монитора, за да проверите дали стенният контакт работи нормално.



3. Ако проблемът остава, може би трябва да се обадите на продавача за нов захранващ блок. Ако захранващият блок функционира, свържете се с продавача на дънната платка на ASUS за гаранционен сервиз на дънната платка.

3.2.2 Не се зарежда системата; нищо не се показва на екрана

Повечето от грешките при зареждане на системата и липсата на възпроизвеждане върху екрана са в резултата на дефект на устройство или неправилна инсталация. Следвайте указанията по-долу, за да отстраните проблема:

1. Проверете дали всички захранващи кабели са включени, включително тези на системата и на монитора.
2. Проверете дали проблемът не е предизвикан от допълнителните платки и устройства.
    - Отстранете всички допълнителни платки и устройства. Използвайте само дънна платка, монитор, VGA платка, модули памет, захранващ блок, радиатор и вентилатор на процесора, клавиатура и мишка, за да презаредите системата.
    - Ако системата работи нормално, значи проблемът се предизвиква от едно от допълнителните устройства. Инсталирайте обратно в системата, едно по едно, допълнителните устройства, които сте отстранили, и открийте дефектното устройство.
3. Проверете дали проблемът не е предизвикан от основните устройства на системата.
    - Ако имате някои резервни устройства, можете да замените устройствата, за да откриете дефектното устройство, в следната последователност: модул памет, процесор, дънна платка, твърд/оптичен диск, клавиатура/мишка

Когато откриете дефектното устройство, свържете се с продавача на устройството за сервиз.

3.2.3 Неуспешно зареждане на операционната система

1. Ако проблемът възникне, след като сте добавили хардуер: Отстранете новодобавения хардуер и презаредете системата. Ако системата работи нормално без този хардуер, устройството може да е дефектно или несъвместимо със системата. Свържете се с продавача на устройството за помощ.
2. Ако проблемът възникне, след като сте инсталирали софтуер или драйвер: Следвайте указанията по-долу, за да отстраните проблема.
    а. Заредете операционната система в безопасен режим (safe mode) и деинсталирайте софтуера или драйвера.
    б. Свържете се с компанията, създала операционната система, за съдействие.
    в. Ако не успеете да отстраните проблема по предишното указание, може да се наложи да си форматирате твърдия диск и да преинсталирате наново операционната система.
3. Ако проблемът възникне, след като сте сменили настройките на BIOS, презаредете компютъра и влезте в менюто на BIOS, за да заредите подразбиращите се настройки. За подробности направете справка с ръководството за потребителя на дънната платка.

4. Ако проблемът е причинен от заразяване с компютърен вирус или повреда на файлове, следвайте указанията по-долу, за да отстраните проблема:
   а. Заредете операционната система в безопасен режим (safe mode) и направете пълна проверка за вируси, като използвате антивирусна програма.
   б. Свържете се с компанията, създала операционната система, за съдействие.
   в. Ако не успеете да отстраните проблема по предишното указание, може да се наложи да си форматирате твърдия диск и да преинсталирате наново операционната система.

3.2.4 Често задавани въпроси

В1: Паметта, докладвана при POST, е различна от инсталираната памет.

О1: Разликата при докладваната памет може да е в резултат на дефектни модули памет или неправилна инсталация на DIMM. Проверете дали DIMM паметите са в добро състояние и дали са инсталирани правилно. За подробности направете справка в ръководството за потребителя на дънната платка. Ако сте инсталирали 4,0 GB памет и се докладват 3,X GB, това е нормално.

В2. Системата не може да открие дискетното устройство, но дискетното устройство свети.

О2: Кабелите на дискетното устройство са инсталирани неправилно. Проверете дали червената ивица на кабела (от страната на пин 1) съвпада с пин 1 на дискетното устройство.

В3: Не се зарежда операционната система след USB флашдиск или външен твърд диск.

О3: Когато системата открие USB флашдиск или твърд диск с USB интерфейс, тя може да смени приоритета на устройството при зареждане. Отстранете USB устройството и презаредете системата.

В4: При инсталиране на Windows XP системата не може да открие твърдите дискове, инсталирани на RAID контролер.

О4: Windows XP не включва драйвер за RAID контролер, така че твърдите дискове не се откриват. Копирайте върху дискета драйвера за RAID контролера и когато зареждате системата от Windows XP диска, натиснете <F6>, за да се прочете драйвера от дискетата. За подробности направете справка с ръководството за потребителя на дънната платка.

Глава 4: Съвети относно грижите за компютър

4.1 Правилни грижи за вашия персонален компютър

Вашият персонален компютър е като другите домакински уреди. Пазете компютъра си далеч от влага, директни слънчеви лъчи и източници на статично електричество. Не трябва да премествате компютъра, когато той е включен, за да не го повредите. Вътрешният прах оказва влияние върху работата на дисковото устройство и допринася за възникване на проблеми с прегряването, което причинява срив в компютъра или повреда на компонентите.

4.2 Основни познания

1. Покривайте компютъра си с калъф против прах, когато не го използвате.
2. Когато използвате компютъра, не поставяйте нищо върху монитора, което да блокира вентилационните отвори. Прегряването може да причини повреда на монитора.
3. Не поставяйте компютъра близо до стена, а оставяйте известно пространство за разсейване на топлината. Прегряването може да причини срив на системата.
4. Поставете компютъра на стабилна повърхност.
5. Пазете компютъра далеч от места с прекалено висока или прекалено ниска температура. Най-добрата околна температура е от 5°C до 30°C. Използвайте климатик или вентилатор за по-добро разсейване на топлината.
6. Подредете широките кабели прибрано, за да се избегне недостатъчната циркулация на въздуха.

4.3 Познания за използване

1. Включвайте и изключвайте своя компютър правилно. Ако компютърът трябва да бъде включен продължително време, използвайте по-добър вентилатор за системата/процесора и захранващ блок за високо напрежение.
2. Внезапно спиране на тока може да повреди твърдия диск. Ако захранването е нестабилно, препоръчително е към компютъра да добавите непрекъсваемо захранване (UPS).
3. Редовно пренареждайте файловете с данни, проверявайте за вируси, актуализирайте антивирусната си програма и дефрагментирайте диска.
4. Почиствайте компютъра си редовно от прах (преди почистване изключвайте всички захранващи кабели).
    - Деинсталирайте дънната платка и твърдия/оптичния диск, а след това ги почиствайте със спрей от сгъстен въздух (canned air) или мека четка.
    - Отстранявайте праха и космите от захранващия блок с антистатична прахосмукачка.

4.4 Съвети

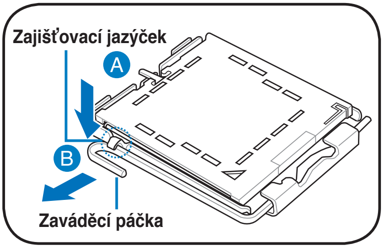
1. Ако няма да използвате компютъра си продължително време, поставете изсушаващи абсорбери на влага в шасито, за да предотвратите повреди от влага.
2. В някои горещи и влажни климатични зони е добре да включвате компютъра си поне веднъж на две седмици. Това също помага за предотвратяване на повреди от влага.

Kapitola 1: Rychlý start

1.1 Instalace procesoru

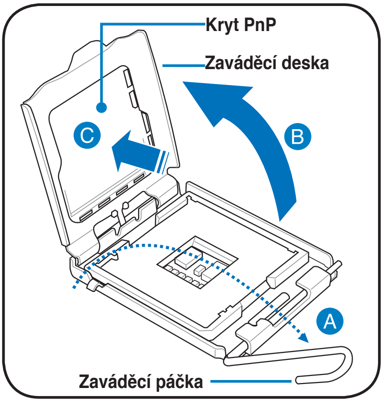
1.1.1 Patice Intel® LGA775

1. Vyhledejte patici procesoru na základní desce.
2. Palcem stiskněte zaváděcí páčku (A), potom ji přesuňte vlevo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.

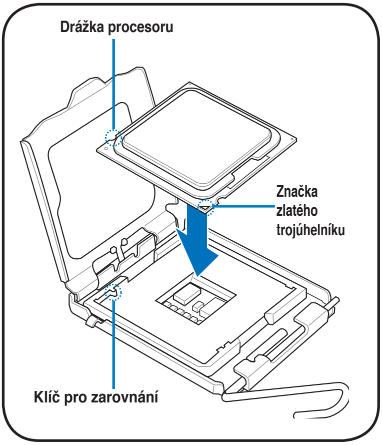

Zajišťovací jazýček
A
B
Zaváděcí páčka

Aby se zabránilo poškození kolíků patice, nevyjímejte kryt PnP, pokud neinstalujete procesor.

3. Zvedněte zaváděcí páčku ve směru šipky do úhlu 135°.
4. Pomocí palce a prostředníku zvedněte zaváděcí desku do úhlu 100° (4A), potom vysuňte kryt PnP z okénka zaváděcí desky (4B).

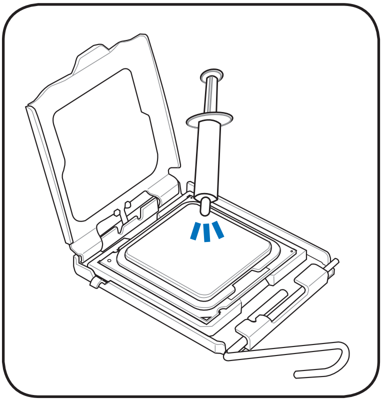

Kryt PnP
Zaváděcí deska
C
B
A
Zaváděcí páčka

5. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním levém rohu patice, a nasaďte klíč pro zarovnání patice do drážky procesoru.



Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru!

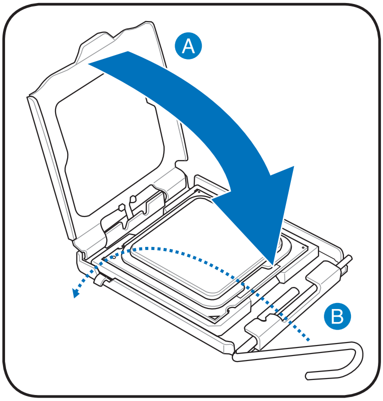
6. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

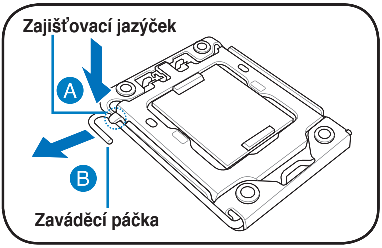
7. Zavřete zaváděcí desku (A) a potom stiskněte zaváděcí páčku (B) tak, aby se zachytila v zajišťovacím jazýčku.



1.1.2 Patice Intel® LGA1366

1. Vyhledejte patici procesoru na základní desce.

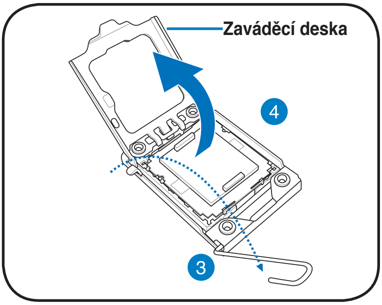
2. Palcem stiskněte zaváděcí páčku (A), potom ji přesuňte vlevo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.



Zajišťovací jazýček
A
B
Zaváděcí páčka

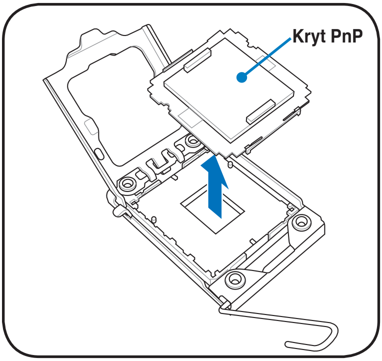
Aby se zabránilo poškození kolíků patice, nevyjímejte kryt PnP, pokud neinstalujete procesor.

3. Zvedněte zaváděcí páčku ve směru šipky do úhlu 135°.
4. Pomocí palce a prostředníku zvedněte zaváděcí desku do úhlu 100°.

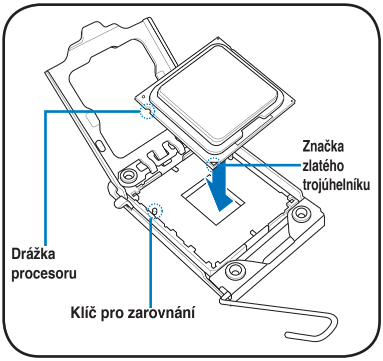


Zaváděcí deska
4
3

5. Sejměte kryt PnP z patice procesoru.



6. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním-levém rohu patice, a nasaďte klíče pro zarovnávání patice do drážek procesoru.

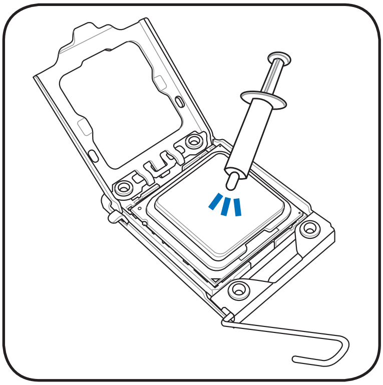


Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru!

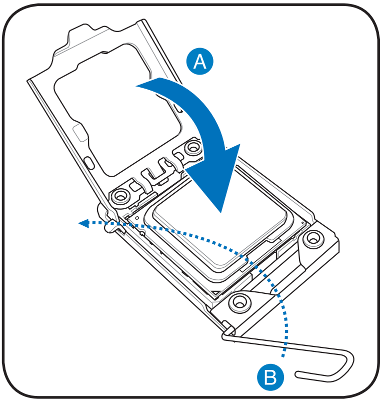
7. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.

Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.



8. Zavřete zaváděcí desku (A) a potom stiskněte zaváděcí páčku (B) tak, aby se zachytila v zajišťovacím jazýčku.

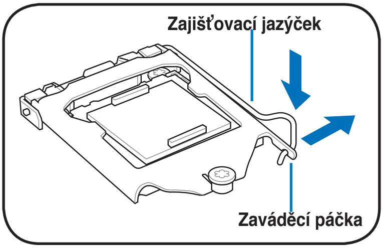


1.1.3 Patice Intel® LGA1156

Procesor LGA1155 není kompatibilní s paticí LGA1156. NEINSTALUJTE procesor LGA1155 do patice LGA1156.

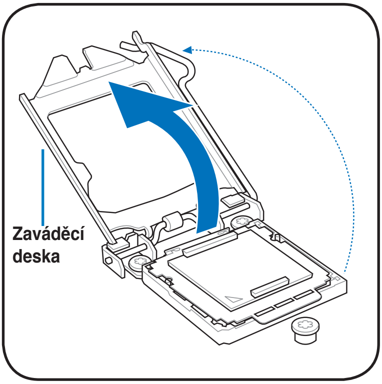
1. Vyhledejte patici procesoru na základní desce.

2. Palcem stiskněte zaváděcí páčku (A) a potom ji přesuňte vpravo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.

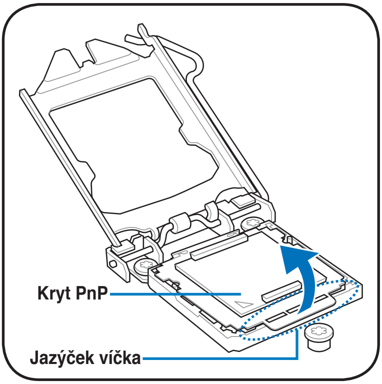

Zajišťovací jazýček
Zaváděcí páčka

Aby se zabránilo poškození kolíků patice, nevyjímejte kryt PnP, pokud neinstalujete procesor.

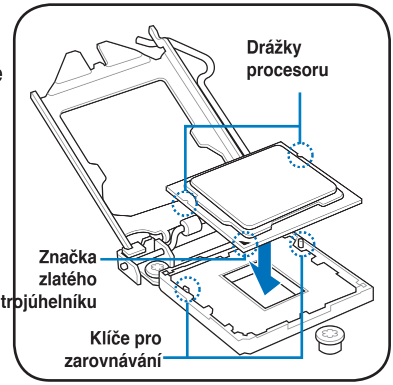
3. Zvedněte zaváděcí páčku ve směru šipky, dokud se zaváděcí deska zcela nezvedne.


Zaváděcí deska

4. Sejměte kryt PnP z patice procesoru zvednutím samotného jazýčku.

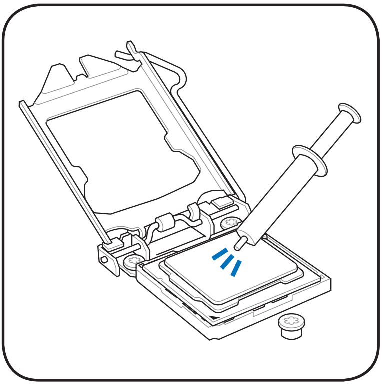

Kryt PnP
Jazýček víčka

5. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním-levém rohu patice, a nasaďte klíče pro zarovnávání patice do drážek procesoru.



Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru!

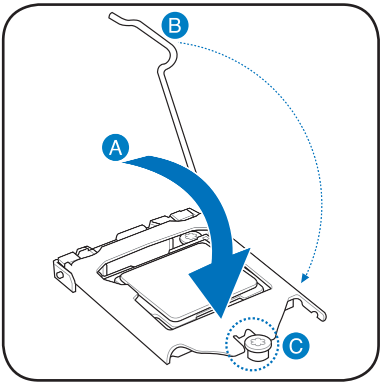
6. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



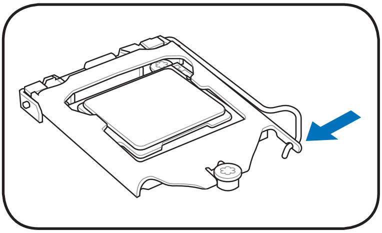
Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

7. Zavřete zaváděcí desku (A) a potom stiskněte zaváděcí páčku (B) tak, aby se přední okraj zaváděcí desky zasunul pod retenční zámek (C).



8. Zasuňte zaváděcí páčku pod zajišťovací jazýček.

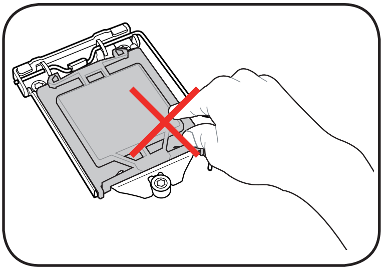


1.1.4 Patice Intel® LGA1155 (Kryt PnP na zaváděcí desce)

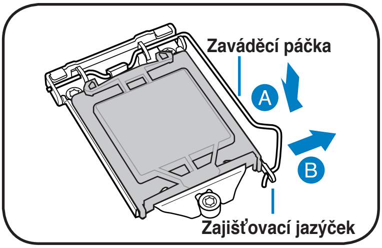
Procesor LGA1156 není kompatibilní s paticí LGA1155. NEINSTALUJTE procesor LGA1156 do patice LGA1155.

1. Vyhledejte patici procesoru na základní desce.

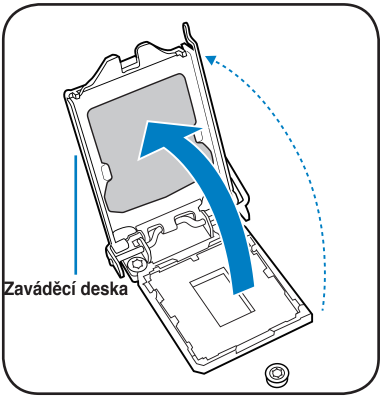
2. Před instalací procesoru nezapomeňte sejmout kryt PnP z patice procesoru.



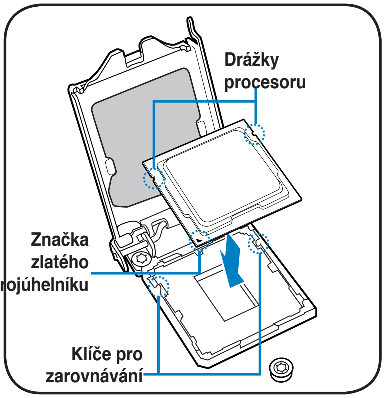
3. Palcem stiskněte zaváděcí páčku (A) a potom ji přesuňte vpravo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.



4. Zvedněte zaváděcí páčku ve směru šipky, dokud se zaváděcí deska zcela nezvedne.

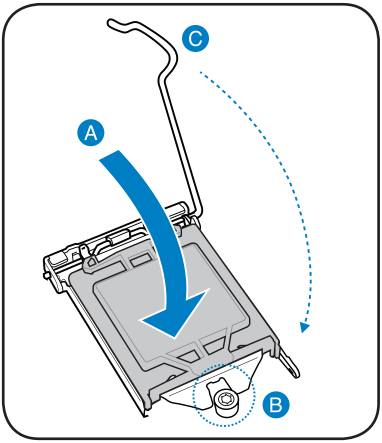


5. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním-levém rohu patice, a nasaďte klíče pro zarovnávání patice do drážek procesoru.

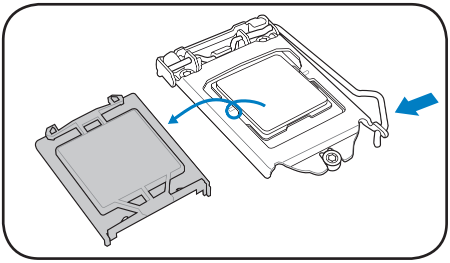

Drážky procesoru
Značka zlatého trojúhelníku
Klíče pro zarovnávání

⚠ Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru!

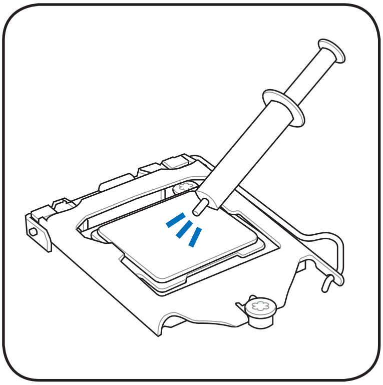
6. Zavřete zaváděcí desku (A) tak, aby se přední okraj zaváděcí desky zasunul pod retenční zámek (B). Potom stiskněte zaváděcí páčku (C).



7. Zasunutím zaváděcí páčky pod zajišťovací jazýček sejměte kryt PnP z patice procesoru.



8. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

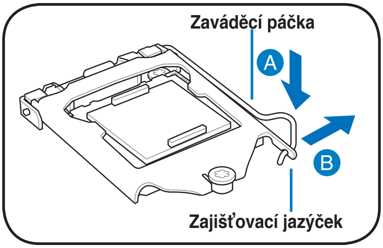
1.1.5 Patice Intel® LGA1155 (Kryt PnP pod zaváděcí deskou)

Procesor LGA1156 není kompatibilní s paticí LGA1155. NEINSTALUJTE procesor LGA1156 do patice LGA1155.

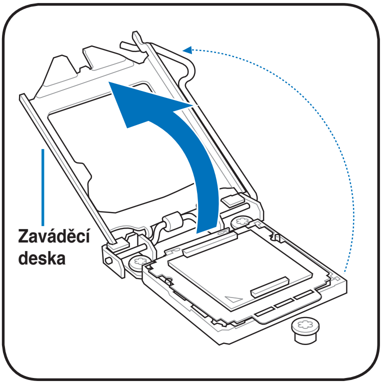
1. Vyhledejte patici procesoru na základní desce.

2. Palcem stiskněte zaváděcí páčku (A) a potom ji přesuňte vpravo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.

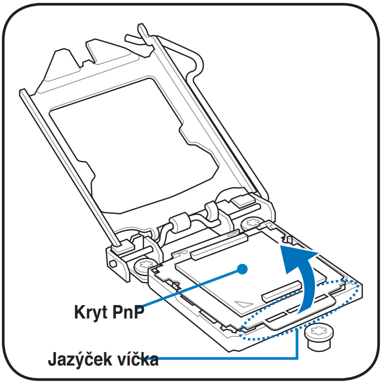
Aby se zabránilo poškození kolíků patice, nevyjímejte kryt PnP, pokud neinstalujete procesor.


Zaváděcí páčka
A
B
Zajišťovací jazýček

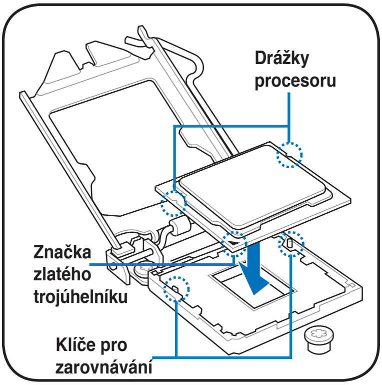
3. Zvedněte zaváděcí páčku ve směru šipky, dokud se zaváděcí deska zcela nezvedne.


Zaváděcí deska

4. Sejměte kryt PnP z patice procesoru zvednutím samotného jazýčku.

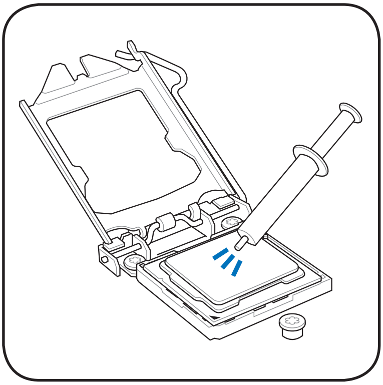

Kryt PnP
Jazýček víčka

5. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním-levém rohu patice, a nasaďte klíče pro zarovnávání patice do drážek procesoru.



Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru!

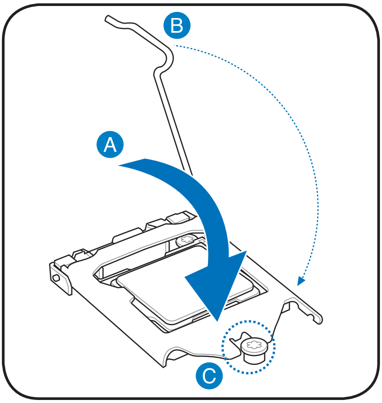
6. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



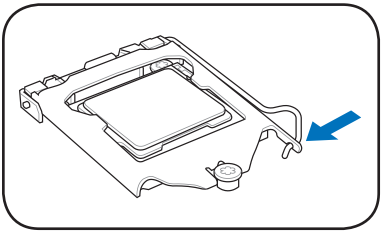
Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

7. Zavřete zaváděcí desku (A) a potom stiskněte zaváděcí páčku (B) tak, aby se přední okraj zaváděcí desky zasunul pod retenční zámek (C).



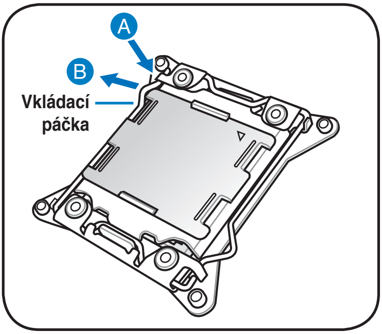
8. Zasuňte zaváděcí páčku pod zajišťovací jazýček.



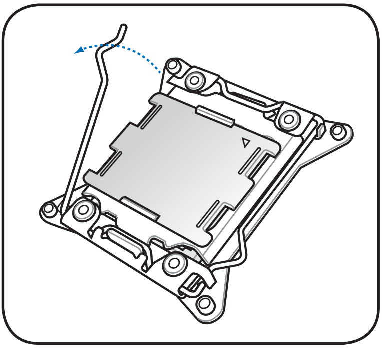
1.1.6 Patice Intel® LGA2011

1. Vyhledejte patici procesoru na základní desce.
2. Palcem stiskněte zaváděcí páčku (A), potom ji přesuňte vlevo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.

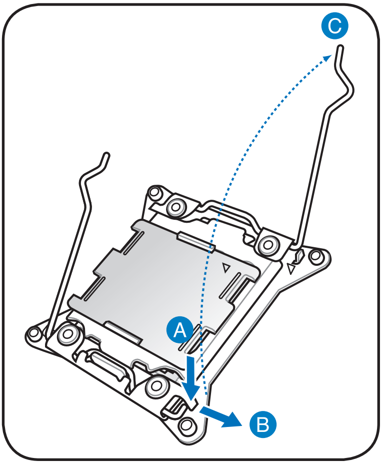
> Aby se zabránilo poškození kolíků patice, nevyjímejte kryt PnP, pokud neinstalujete procesor.



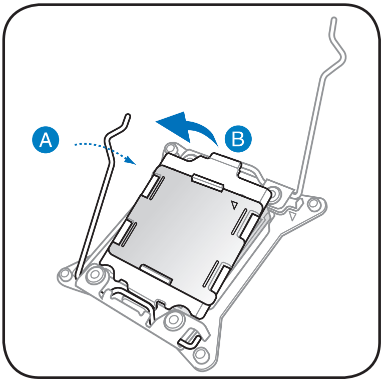
3. Mírně zvedněte zaváděcí páčku ve směru šipky.



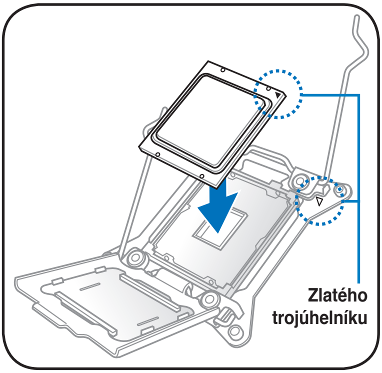
4. Zavřete zaváděcí desku (A) a potom stiskněte zaváděcí páčku (B) tak, aby se přední okraj zaváděcí desky zasunul pod retenční zámek (C). Mírně zvedněte zaváděcí páčku ve směru šipky (C).



5. Stisknutím levé zaváděcí páčky (A) zvedněte zaváděcí desku (B).

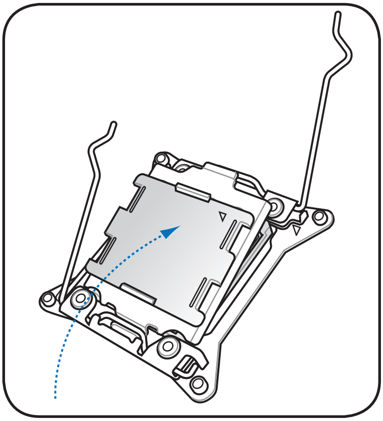


6. Umístěte procesor přesně na patici, trojúhelníková značka musí být v pravém horním rohu patice.

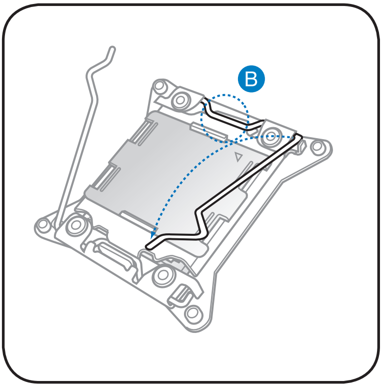


Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru!

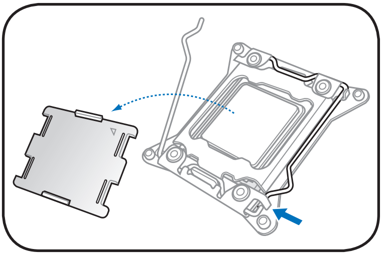
7. Zavřete zatížení desky.



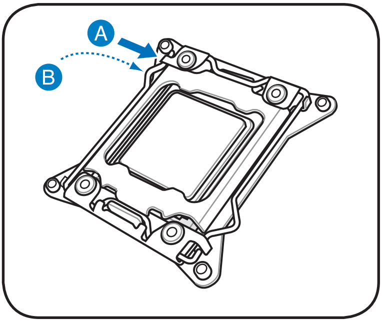
8. Stiskněte pravou vkládací páčku (A) směrem dolů, hrana vkládací desky se musí zachytit o páčku (B).



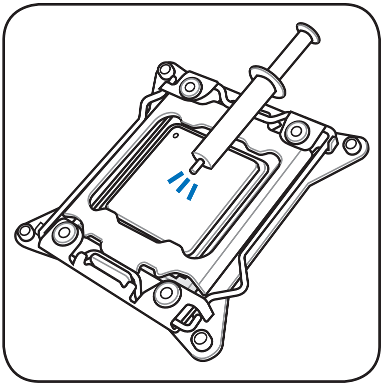
9. Vložte pravou vkládací páčku pod zajišťovací výstupek. Vyjměte PnP víčko z patice procesoru.



10. Stiskněte levou vkládací páčku (A) a pak páčku vložte pod zajišťovací výstupek (B).



11. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.

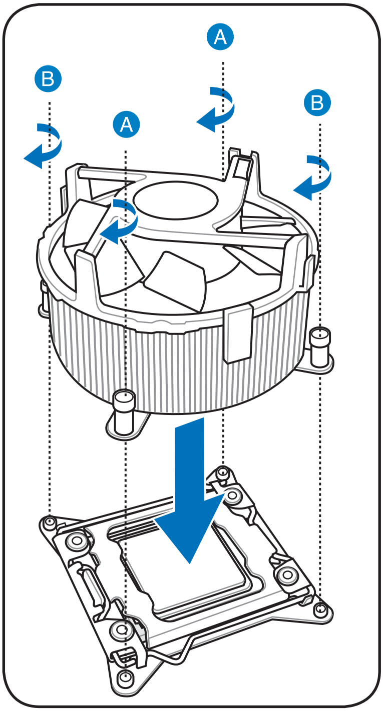


Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok..

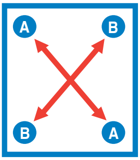
Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

12. Umístěte tepelnou jímku na horní stranu nainstalovaného procesoru tak, aby byly čtyři úchyty zorientovány podle otvorů na patici procesoru.

13. Křížovým šroubovákem otočte každý ze čtyř šroubků pouze natolik, aby byla tepelná jímka přichycena k patici procesoru. Když jsou čtyři šroubky přichyceny, postupně je utáhněte, aby byla tepelná jímka zcela zajištěna.



Utáhněte čtyři šroubky tepelné jímky v úhlopříčném pořadí.

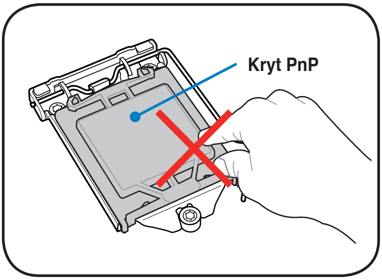


1.1.7 Patice Intel® LGA1150 (Kryt PnP na zaváděcí desce)

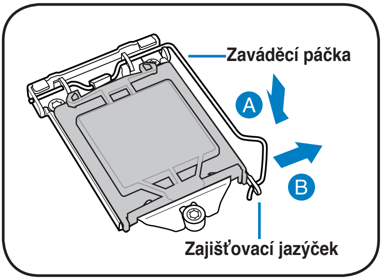
Zkontrolujte, zda instalujete správný procesor určený pouze pro patici LGA1150. NEINSTALUJTE do patice LGA1150 procesor určený pro patice LGA1155 a LGA1156.

1. Vyhledejte patici procesoru na základní desce.

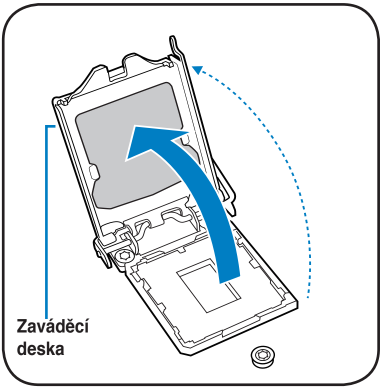
Ještě NEODSTRAŇUJTE krytku PnP z patice procesoru. Mohlo by dojít k ohnutí kolíku patice. Umístění krytku PnP viz následující obrázek.



2. Palcem stiskněte zaváděcí páčku (A) a potom ji přesuňte vpravo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.

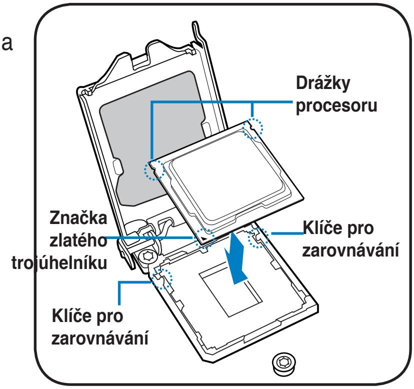


3. Zvedněte zaváděcí páčku ve směru šipky, dokud se zaváděcí deska zcela nezvedne.

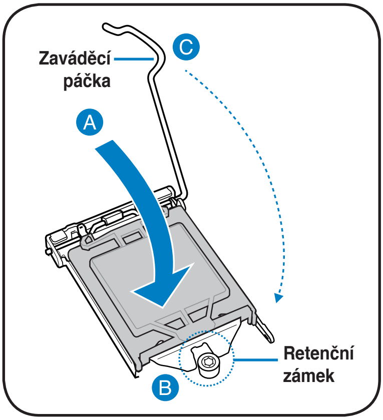


4. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním-levém rohu patice, potom nasaďte drážky procesoru do vodicích zářezů patice.

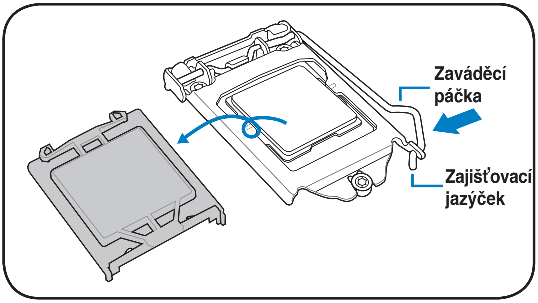
Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru.


Drážky procesoru
Značka zlatého trojúhelníku
Klíče pro zarovnávání
Klíče pro zarovnávání

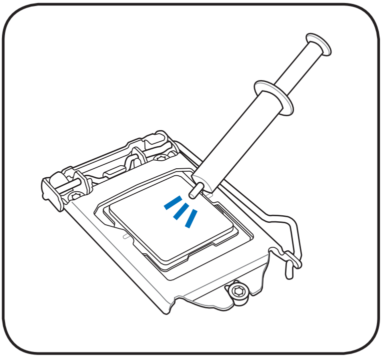
5. Zavřete zaváděcí desku (A) tak, aby se přední okraj zaváděcí desky zasunul pod retenční zámek (B). Potom stiskněte zaváděcí páčku (C).


Zaváděcí páčka
C
A
Retenční zámek
B

6. Zasunutím zaváděcí páčky pod zajišťovací jazýček sejměte kryt PnP z patice procesoru.


Zaváděcí páčka
Zajišťovací jazýček

7. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

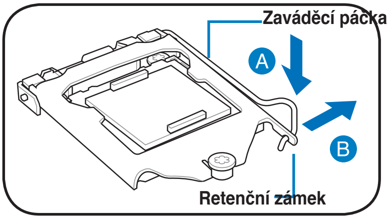
Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

1.1.8 Patice Intel® LGA1150 (Kryt PnP pod zaváděcí deskou)

Zkontrolujte, zda instalujete správný procesor určený pouze pro patici LGA1150. NEINSTALUJTE do patice LGA1150 procesor určený pro patice LGA1155 a LGA1156.

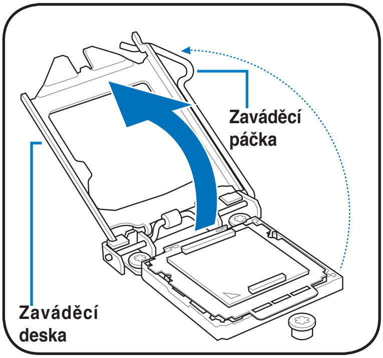
1. Vyhledejte patici procesoru na základní desce.

2. Palcem stiskněte zaváděcí páčku (A) a potom ji přesuňte vpravo (B) tak, aby byla uvolněná ze zajišťovacího jazýčku.

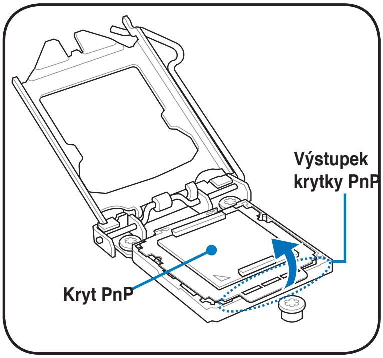

Zaváděcí páčka
A
B
Retenční zámek

Ještě NEODSTRAŇUJTE krytku PnP z patice procesoru. Mohlo by dojít k ohnutí kolíku patice

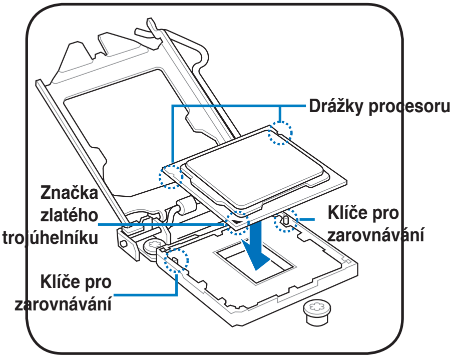
3. Zvedněte zaváděcí páčku ve směru šipky, dokud se zaváděcí deska zcela nezvedne.


Zaváděcí páčka
Zaváděcí deska

4. Sejměte kryt PnP z patice procesoru zvednutím samotného jazýčku.

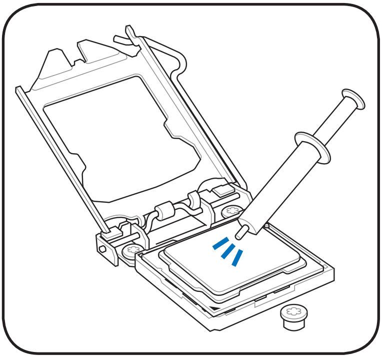

Výstupek krytky PnP
Kryt PnP

5. Umístěte procesor na patici tak, aby se zlatý trojúhelník nacházel na dolním-levém rohu patice, potom nasaďte drážky procesoru do vodicích zářezů patice.


Drážky procesoru
Značka zlatého trojúhelníku
Klíče pro zarovnávání
Klíče pro zarovnávání

Procesor lze nainstalovat pouze v jedné správné orientaci. NEZATLAČUJTE procesor do patice silou, aby se zabránilo ohnutí konektorů na patici a poškození procesoru.

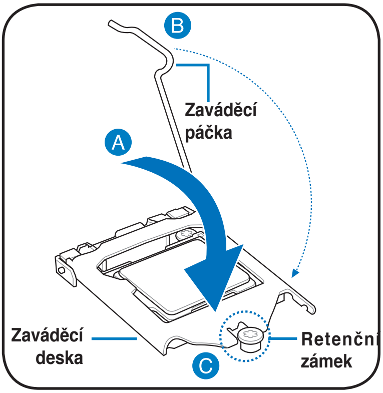
6. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



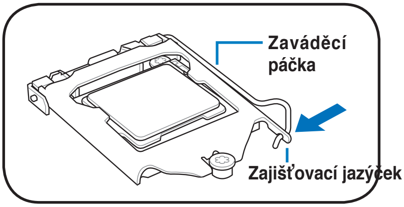
Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

7. Zavřete zaváděcí desku (A) a potom stiskněte zaváděcí páčku (B) tak, aby se přední okraj zaváděcí desky zasunul pod retenční zámek (C).


B
Zaváděcí páčka
A
Zaváděcí deska
C
Retenční zámek

8. Zasuňte zaváděcí páčku pod zajišťovací jazýček.

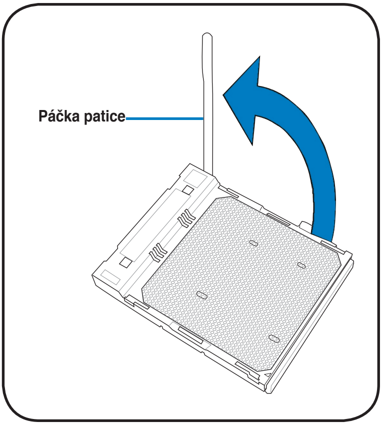

Zaváděcí páčka
Zajišťovací jazýček

1.1.9 Patice AMD AM2 / AM2+ / AM3

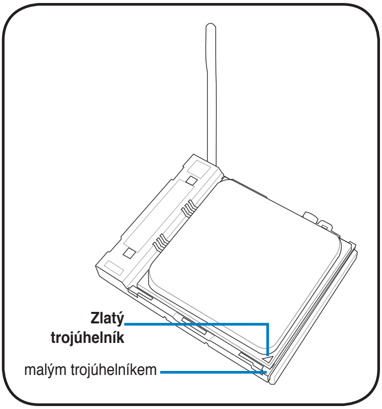
- Patice AMD AM2 a AM2+ jsou kompatibilní s procesory AMD AM2, AM2+ a AM3.
- Patice AMD AM3 je kompatibilní s procesory AMD AM3. NEINSTALUJTE procesor AMD AM2+ / AM2 na patici AM3. Pouze některé modely základních desek AM3 podporují procesory AM3+ upgradováním systému BIOS. Podrobnosti viz stránka podpory společnosti ASUS.

1. Vyhledejte patici procesoru na základní desce.
2. Odemkněte patici stisknutím páčky do strany a zvednutím do úhlu 90°.

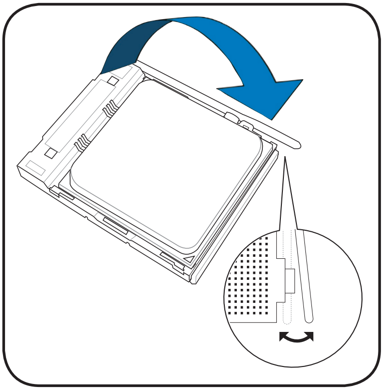
Páčka patice musí být zvednutá do úhlu 90°. V opačném případě procesor zcela nedosedne.



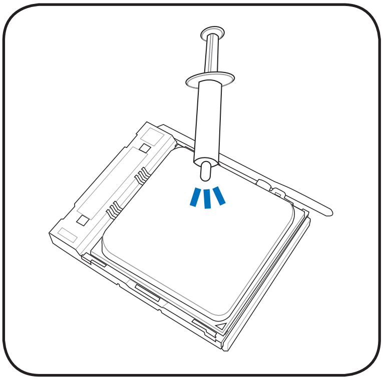
3. Umístěte procesor nad patici tak, aby roh procesoru se zlatým trojúhelníkem odpovídal rohu patice s malým trojúhelníkem.
4. Opatrně zasuňte procesor do patice tak, aby dosedl na místo.



5. Když je procesor usazen, stisknutím páčky patice jej zajistěte. Když páčka zacvakne do bočního jazýčku, znamená to, že je procesor zajištěn.



6. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.



Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

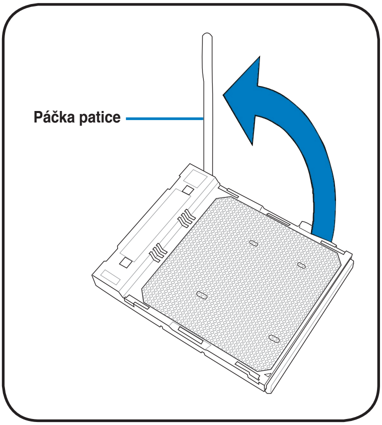
Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

1.1.10 Patice AMD AM3+

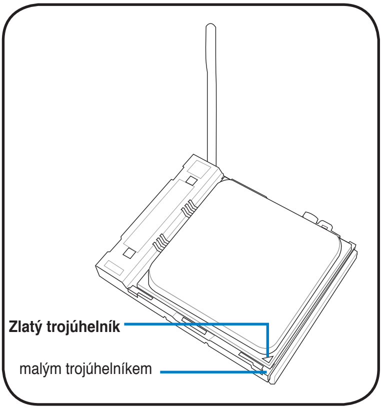
Patice AMD AM3+ je kompatibilní s procesory AMD AM3+ a AM3. Pouze některé modely základních desek AM3 podporují procesory AM3+ upgradováním systému BIOS. Podrobnosti viz stránka podpory společnosti ASUS.

1. Vyhledejte patici procesoru na základní desce.
2. Odemkněte patici stisknutím páčky do strany a zvednutím do úhlu 90°.

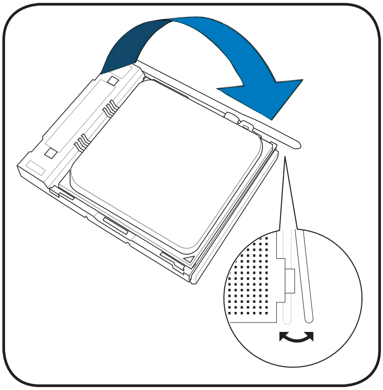
Páčka patice musí být zvednutá do úhlu 90°. V opačném případě procesor zcela nedosedne.



3. Umístěte procesor nad patici tak, aby roh procesoru se zlatým trojúhelníkem odpovídal rohu patice s malým trojúhelníkem.
4. Opatrně zasuňte procesor do patice tak, aby dosedl na místo.



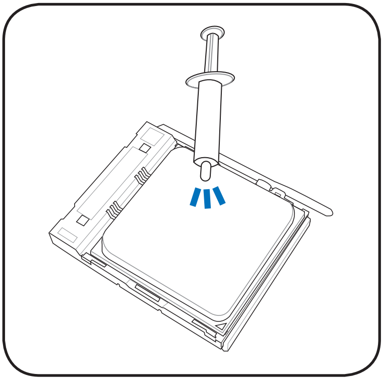
5. Když je procesor usazen, stisknutím páčky patice jej zajistěte. Když páčka zacvakne do bočního jazýčku, znamená to, že je procesor zajištěn.



6. Naneste materiál tepelného rozhraní na volnou plochu procesoru, se kterou bude v kontaktu tepelná jímka, tak aby tvořil rovnoměrnou vrstvu.

Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě přeskočte tento krok.

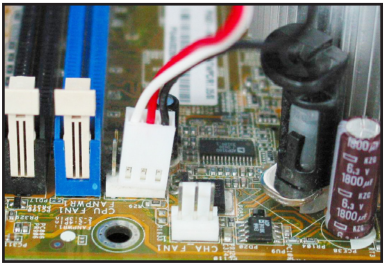
Materiál tepelného rozhraní je jedovatý a nejedlý. NEJEZTE jej. Pokud vnikne do vašich očí nebo se dostane do kontaktu s vaší pokožkou, ihned jej omyjte a vyhledejte odbornou lékařskou pomoc.

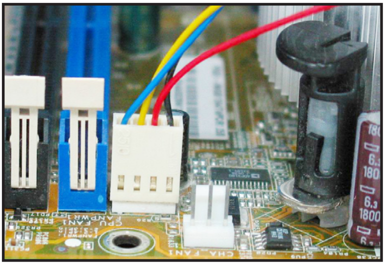


1.2 Instalace tepelné jímky a ventilátoru

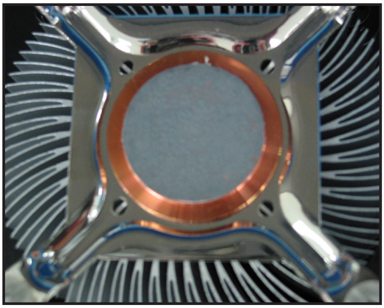
Pokyny pro instalaci tepelné jímky a ventilátoru procesoru:

1. Zvolte sestavu tepelné jímky a ventilátoru s certifikací Intel nebo AMD podle vaší základní desky. K dispozici je 3kolíkový (vlevo) a 4kolíkový (vpravo) konektor ventilátoru. Technologii ASUS Q-Fan podporují pouze ventilátory procesoru s 4kolíkovými konektory.





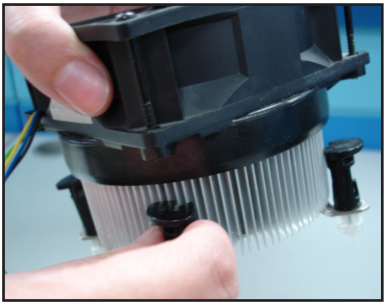
Tepelná jímka s certifikací Intel®:



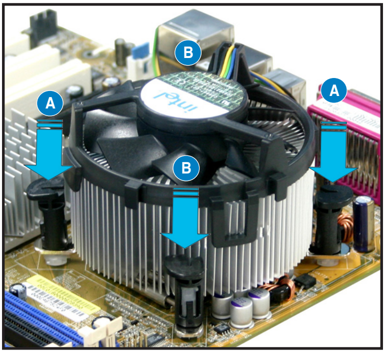
2. Některé tepelné jímky jsou dodávány s předem nanesenou tepelnou pastou. V takovém případě pastu neodstraňujte a bezprostředně před instalací sejměte pouze ochranný film. V ostatních případech naneste před instalací tepelné jímky několik kapek tepelné pasty na plochu procesoru, se kterou bude tepelná jímka v kontaktu. Rozprostřete pastu do rovnoměrné tenké vrstvy.

Aby se zabránilo znečištění pasty, NEROZTÍREJTE pastu přímo prstem.

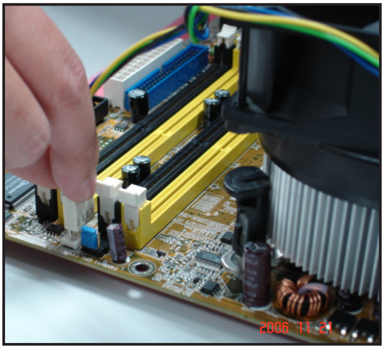
3. Zorientujte jednotlivé úchyty tak, aby úzký konec drážky směřoval ven.



4. Zatlačením vždy dvou protilehlých úchytů najednou zajistěte sestavu tepelné jímky a ventilátoru na místě.



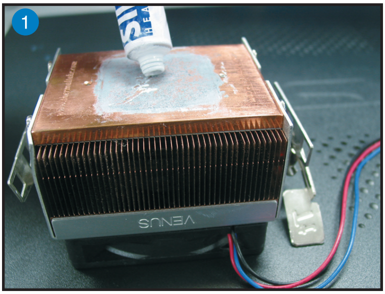
5. Připojte kabel ventilátoru procesoru k příslušnému konektoru na základní desce.

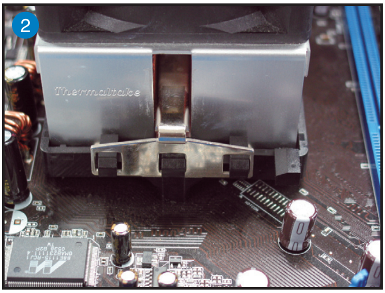


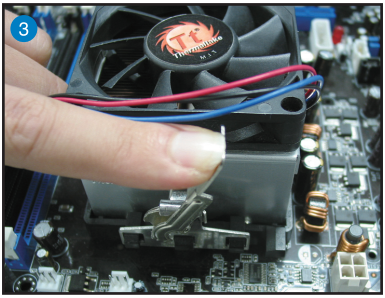
NEZAPOMEŇTE připojit konektor ventilátoru procesoru! Pokud tento konektor nezapojíte, může dojít k chybám sledování hardwaru; pro zajištění maximální plochy rozptylu tepla doporučujeme použít všesměrovou tepelnou jímku.

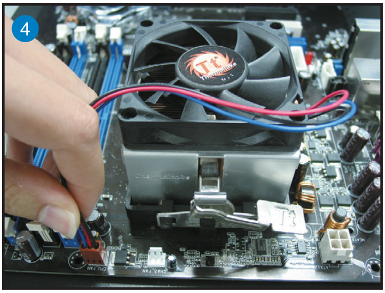
Tepelná jímka s certifikací AMD:

Při instalaci tepelné jímky s certifikací AMD postupujte podle následujících pokynů.







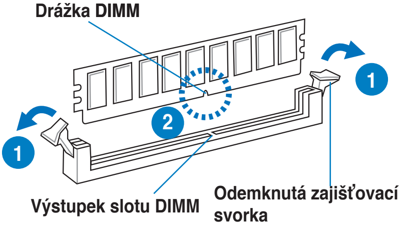


1.3 Instalace paměťového modulu DIMM

Před přidáváním nebo odebíráním paměťových modulů DIMM nebo jiných systémových součástí odpojte napájení. V případě zanedbání tohoto pokynu může dojít k vážnému poškození základní desky a jiných součástí.

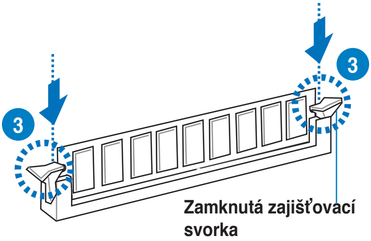
Instalace paměťového modulu DIMM do patice DIMM se dvěma svorkami

1. Rozevřením zajišťovacích svorek odemkněte patici paměťového modulu DIMM.
2. Zorientujte paměťový modul DIMM s paticí tak, aby se drážka na paměťovém modulu DIMM shodovala s výstupkem slotu DIMM na patici.



Paměťový modul DIMM je opatřen drážkou, takže jej lze usadit pouze jedním směrem. NEZATLAČUJTE paměťový modul DIMM do patice silou nesprávným směrem, aby nedošlo k poškození paměťového modulu DIMM.

3. Uchopte paměťový modul DIMM za oba jeho konce a potom zasuňte paměťový modul DIMM svisle do patice. Zatlačte na oba konce paměťového modulu DIMM současně tak, aby zajišťovací svorky zapadly na místo a aby se paměťový modul DIMM nemohl dále zasunout pro zajištění správného usazení paměťového modulu DIMM.

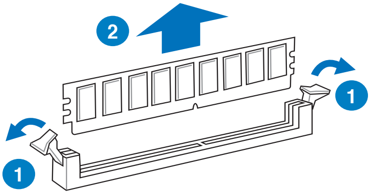


Paměťový modul DIMM vždy zasunujte do patice SVISLE, aby se zabránilo poškození drážky DIMM.

- Chcete-li nainstalovat dva nebo více paměťových modulů DIMM, postupujte podle pokynů v uživatelské příručce dodané v krabici se základní deskou.
- Seznam kvalifikovaných výrobců paměťových modulů viz uživatelská příručka.

Vyjmutí paměťového modulu DIMM z patice DIMM se dvěma svorkami

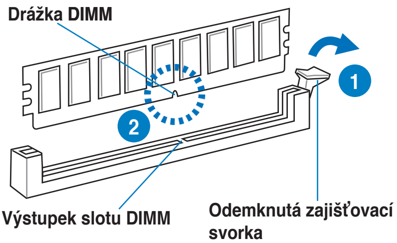
1. Současným stisknutím zajišťovacích svorek ven odemkněte paměťový modul DIMM.
2. Vyjměte paměťový modul DIMM z patice.



Při stisknutí zajišťovacích svorek lehce podepřete paměťový modul DIMM prsty. Pokud paměťový modul DIMM vyskočí ven zvýšenou silo, mohlo by dojít k jeho poškození.

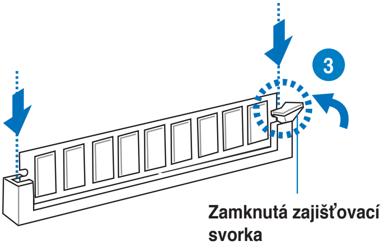
Instalace paměťového modulu DIMM do patice DIMM s jednou svorkou

1. Rozevřením zajišťovacích svorek odemkněte patici paměťového modulu DIMM.
2. Zorientujte paměťový modul DIMM s paticí, aby se drážka na paměťovém modulu DIMM shodovala s výstupkem slotu DIMM na patici.



Paměťový modul DIMM je opatřen drážkou, takže jej lze usadit pouze jedním směrem. NEZATLAČUJTE paměťový modul DIMM do patice silou nesprávným směrem, aby nedošlo k poškození paměťového modulu DIMM. .

3. Uchopte paměťový modul DIMM za oba jeho konce a potom zasuňte paměťový modul DIMM svisle do patice. Zatlačte na oba konce paměťového modulu DIMM současně tak, aby zajišťovací svorky zapadly na místo a aby se paměťový modul DIMM nemohl dále zasunout pro zajištění správného usazení paměťového modulu DIMM.

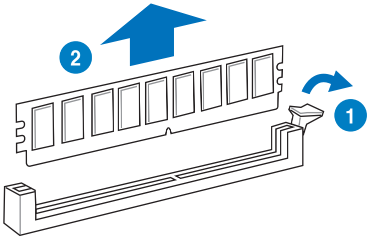


Paměťový modul DIMM vždy zasunujte do patice SVISLE, aby se zabránilo poškození drážky DIMM.

- Chcete-li nainstalovat dva nebo více paměťových modulů DIMM, postupujte podle pokynů v uživatelské příručce dodané v krabici se základní deskou.
- Seznam kvalifikovaných výrobců paměťových modulů viz uživatelská příručka.

Vyjmutí paměťového modulu DIMM z patice DIMM s jednou svorkou

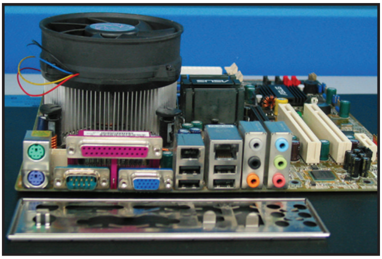
1. Stisknutím zajišťovacích svorek ven odemkněte paměťový modul DIMM.
2. Vyjměte paměťový modul DIMM z patice.



Při stisknutí zajišťovacích svorek lehce podepřete paměťový modul DIMM prsty. Pokud paměťový modul DIMM vyskočí ven zvýšenou silo, mohlo by dojít k jeho poškození.

1.4 Instalace základní desky

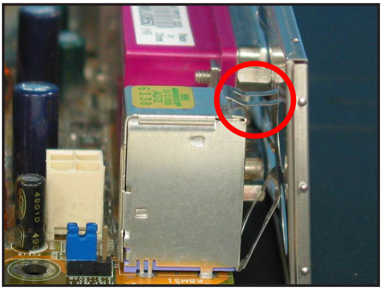
1. Porty I/O se u jednotlivých základních desek liší. Použijte a nainstalujte pouze zadní štít I/O, který je dodán v krabici se základní deskou.



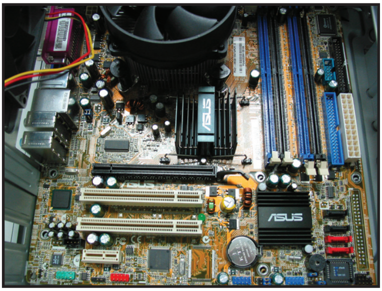
Některé ostré okraje a hroty by mohly způsobit zranění. Před instalací štítu I/O základní desky doporučujeme použít rukavice odolné proti pořezání nebo propíchnutí.

2. Namontujte sloupkové šrouby do odpovídajících šroubových otvorů na kovové desce.

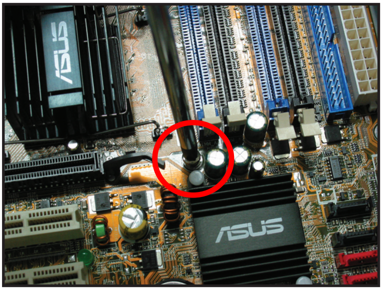
3. Pružiny na okraji štítu I/O by mohly poškodit porty I/O. Při instalaci štítu I/O postupujte opatrně.



4. Zorientujte základní desky stranou I/O směrem k zadní části skříně a umístěte základní desku do skříně.



5. Nejdříve našroubujte a lehce utáhněte všechny šrouby v úhlopříčném pořadí. Po namontování všech šroubů je zcela rukou utáhněte.



- Před instalací základní desky můžete odmontovat kovové záslepky slotů pro rozšiřovací karty na zadní straně skříně. U některých modelů skříní může být po instalaci základní desky obtížné kovové záslepky slotů demontovat.
- NEPŘETAHUJTE šrouby. Mohlo by dojít k poškození základní desky.

1.5 Instalace zdroje napájení

Existují dva typy běžně používaných zdrojů napájení. Jeden s aktivním systémem PFC (ochrana proti rušení okolních elektrických spotřebičů a zpětnému harmonickému vyzařování do sítě) a druhý s pasivním systémem PFC.

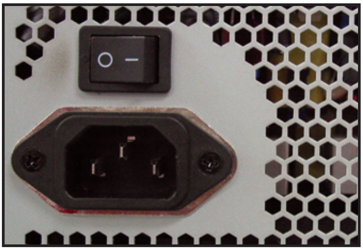
1. Vyberte zdroj napájení.

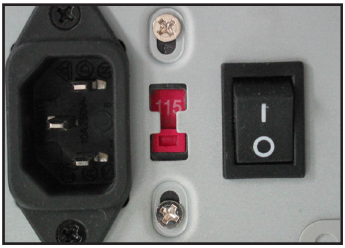
Zdroj napájení s pasivním systémem PFC:

Pasivní systém PFC vyžaduje, aby uživatel ručně nastavit vstupní střídavé napětí.

Zdroj napájení s aktivním systémem PFC:

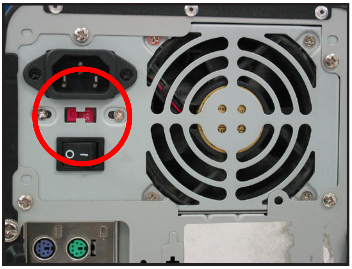
Aktivní systém PFC nastavuje vstupní střídavé napájení automaticky.





2. Používáte-li zdroj napájení s pasivním systémem PFC, nastavte správné vstupní střídavé napájení, které je k dispozici ve vaší oblasti.

Zanedbáním nastavení zdroje napájení na správné vstupní střídavé napětí dojde k závažnému poškození systému.



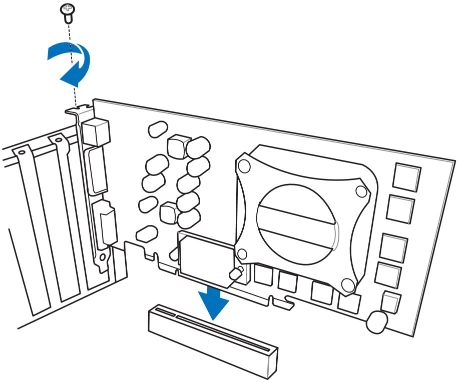
Používejte pouze zdroje napájení s certifikátem bezpečnosti. V případě použití nestabilních zdrojů napájení může dojít k poškození základní desky a dalších součástí. Zdroje napájení, které splňují požadavky základní desky, jsou uvedeny v uživatelské příručce.

1.6 Instalace rozšiřovací karty

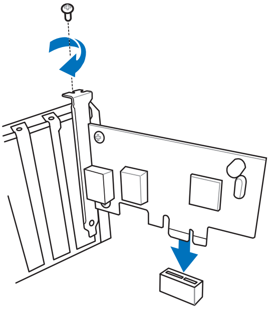
Pokyny pro instalaci rozšiřovací karty:

1. Odmontujte kovovou záslepku naproti rozšiřovací patice, do které chcete nainstalovat rozšiřovací kartu.
2. Nainstalujte rozšiřovací kartu tak, aby byla řádně usazena v patici.
3. Kartu v patici zajistěte šroubkem.
4. Při instalaci další rozšiřovací karty zopakujte výše uvedený postup.

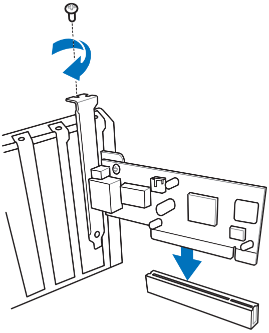
Karta PCIE x16



Karta PCIE x1



Karta PCI

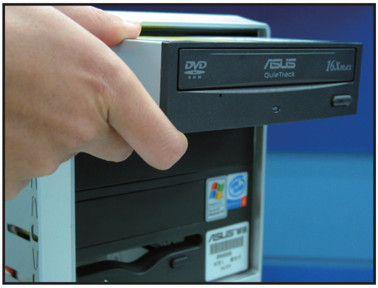


- Pokud je třeba po instalaci rozšiřovací karty nakonfigurovat propojky, postupujte podle pokynů v dokumentaci ke kartě a podle uživatelské příručky k základní desce.
- Pokyny pro připojení signálního kabelu rozšiřovací karty jsou uvedeny v uživatelské příručce k základní desce.

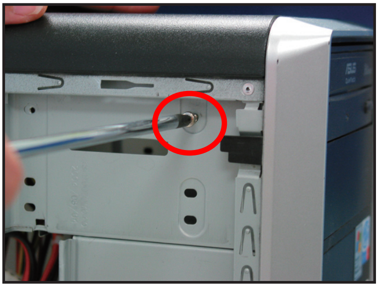
1.7 Instalace diskových jednotek

1.7.1 Optická disková jednotka PATA

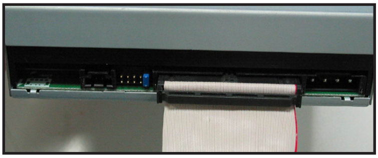
1. Vyjměte záslepku a zasuňte optickou diskovou jednotku do pozice.



2. Zarovnejte otvory pro šroubky a zajistěte disk šroubky.

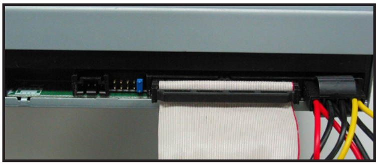


3. Zorientujte a připojte kabel IDE k optické jednotce. Červený proužek na kabelu IDE označuje stranu s kolíkem č. 1 a musí odpovídat jamce Kolík 1 na optické jednotce.

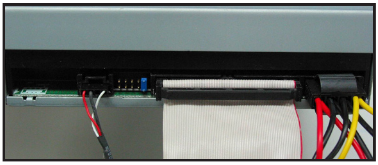


Kabely IDE jsou chráněny proti nesprávnému zapojení. Nikdy nezatlačujte kabel IDE do konektoru silou.

4. Připojte k optické jednotce 4kolíkový napájecí kabel.

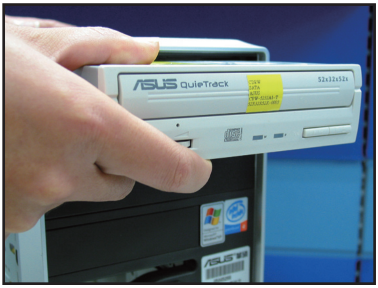


5. Připojte zvukový kabel ke konektoru na optické jednotce.

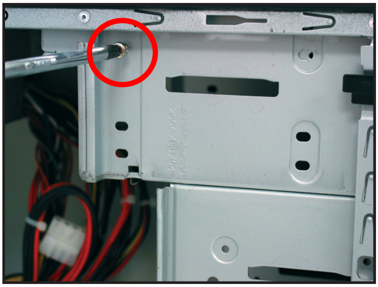


1.7.2 Optická disková jednotka SATA

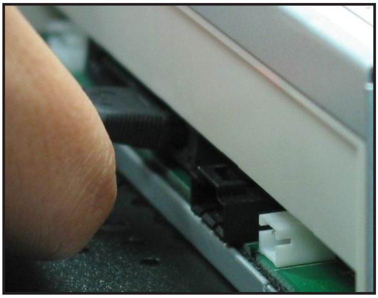
1. Vyjměte záslepku a zasuňte optickou diskovou jednotku do pozice.



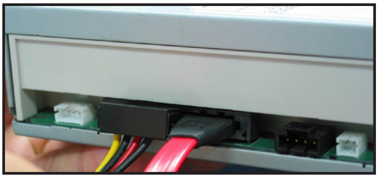
2. Zarovnejte otvory pro šroubky a zajistěte disk šroubky.



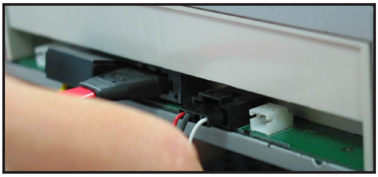
3. Zorientujte a připojte kabel SATA k optické jednotce. Kabely SATA jsou chráněny proti nesprávnému zapojení. Nikdy nezatlačujte kabel SATA do konektoru silou.



4. Připojte k optické jednotce napájecí kabel SATA.

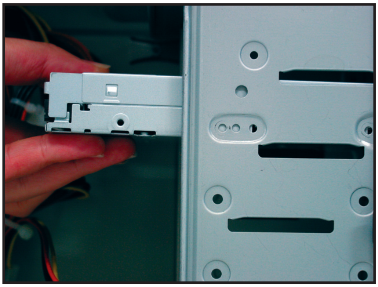


5. Připojte zvukový kabel ke konektoru na optické jednotce.

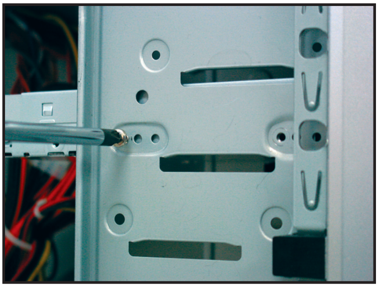


1.7.3 Disketová jednotka

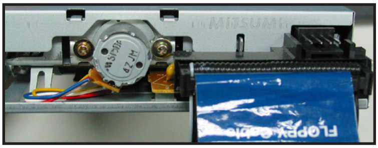
1. Vyjměte záslepku a zasuňte optickou disketovou jednotku do pozice.



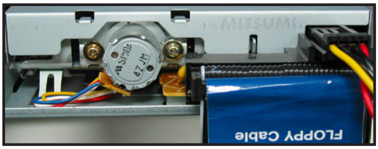
2. Zarovnejte otvory pro šroubky a zajistěte disk šroubky.



3. Zorientujte a připojte kabel rozhraní disketové jednotky k disketové jednotce. Červený proužek na kabelu označuje stranu s kolíkem č. 1 a musí odpovídat kolíku č. 1 na disketové jednotce.

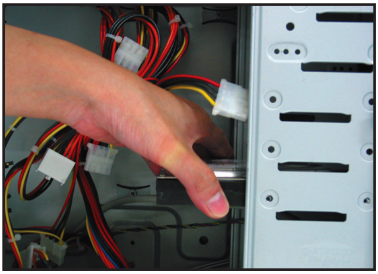


4. Připojte napájecí kabel disketové jednotky ke konektoru na zadní straně disketové jednotky.

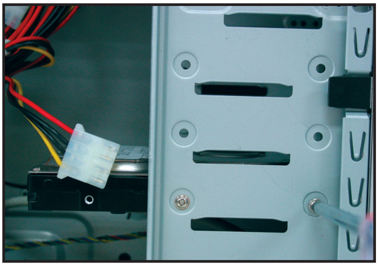


1.7.4 Pevný disk PATA

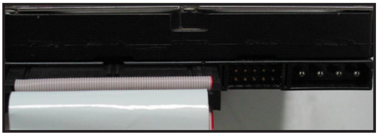
1. Zasuňte pevný disk PATA do pozice.



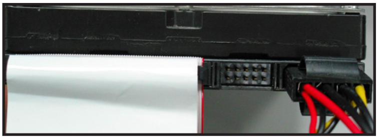
2. Zarovnejte otvory pro šroubky a zajistěte disk šroubky.



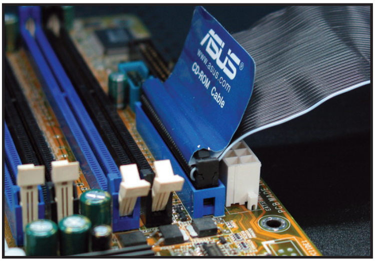
3. Zorientujte a připojte signální kabel k pevnému disku. Červený proužek na kabelu označuje stranu s kolíkem č. 1. Zorientujte drážku proti nesprávnému zapojení nezatlačujte kabel do konektoru silou.



4. Připojte 4kolíkový napájecí kabel ke konektoru na zadní straně pevného disku.

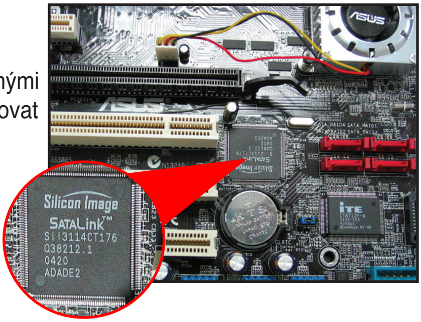


5. Připojte druhý konec signálního kabelu k příslušné patici na základní desce.



Poznámky k instalaci pevného disku PATA

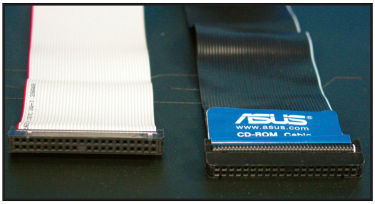
- Pokud je váš operační systém nainstalován na pevném disku řízeném řadičem RAID nebo jinými řadiči, musíte nejdříve nainstalovat ovladač řadiče na pevný disk.


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

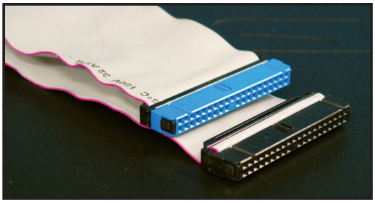
- Konektory kabelu jsou barevně odlišeny. Modrý je pro hostitelský konektor a černošedý je pro primární/sekundární diskovou jednotku

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

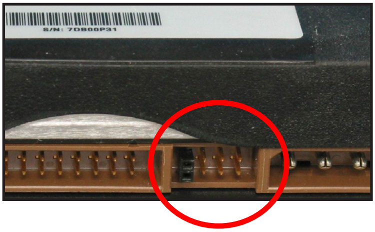
- Pro diskové jednotky ATA IDE jsou k dispozici dva kabely: novější 80žilový (vpravo) a starší 40žilový (vlevo). U diskových jednotek ATA66/100/133 lze dosáhnout lepšího výkonu pouze s 80žilovým kabelem. 40žilové kabely jsou obvykle pro optické jednotky.


ASUS
www.asus.com
CD-ROM Cable

- Kabely jsou opatřeny vysouvacími výstupky. Stačí jednoduše nainstalovat diskové jednotky podle kabelových štítků. Aby se zabránilo poškození kolíků, odpojte kabel zatažením za tyto kabelové výstupky.

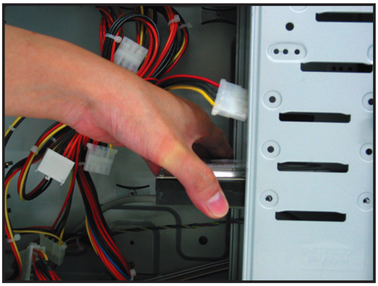


- Při připojování dvou zařízení IDE musíte změnit polohu propojek tak, aby jedna jednotka byla nadřazená a druhá podřazená. Používáte-li 80žilový kabel, můžete použít styl výběru kabelu.

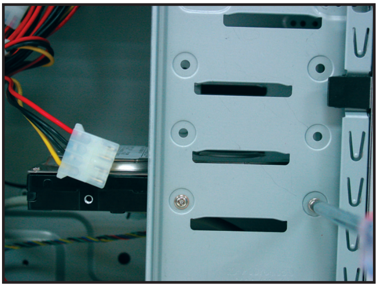

S/N: 7DB00P31

1.7.5 Pevný disk SATA

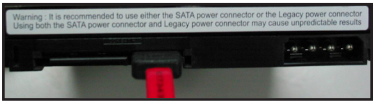
1. Zasuňte pevný disk SATA do pozice.



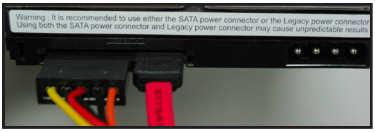
2. Zarovnejte otvory pro šroubky a zajistěte disk šroubky.



3. Zorientujte a připojte kabel SATA k pevnému disku. Kabel lze připojit pouze jedním směrem.

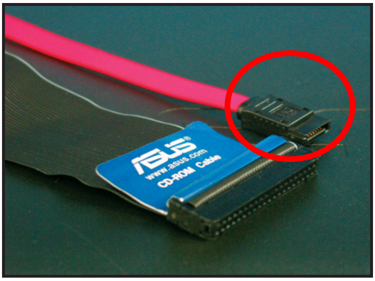

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Připojte napájecí kabel SATA ke konektoru na zadní straně pevného disku.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Poznámky k instalaci pevného disku SATA

- Rozhraní Serial ATA (SATA) umožňuje vyšší rychlost přenosu dat a lepší napěťovou toleranci. Úzký tvar kabelu SATA rovněž odstraňuje problémy s vedením kabeláže a umožňuje lepší průtok vzduchu skříní.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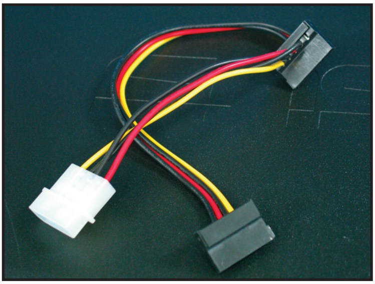
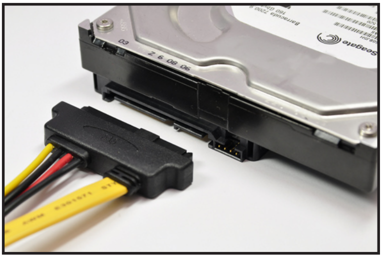
CD-ROM Cable

- Konektor napájecího kabelu SATA se liší od běžného 4kolíkového napájecího konektoru. Pokud váš zdroj napájení není vybaven tímto novým konektorem, jsou se základní deskou ASUS dodávány kabelové adaptéry.

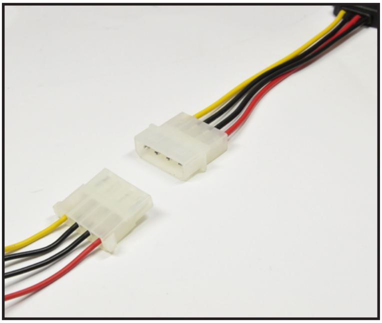


1.7.6 Pevný disk SAS

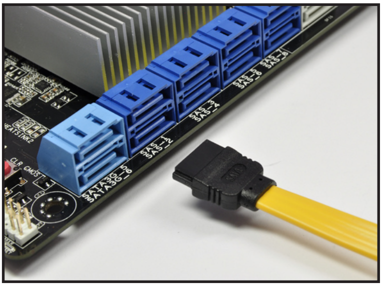
1. Otočte na správnou stranu a připojte kombinovaný signálový / napájecí kabel SAS k pevnému disku. . Kabel lze připojit pouze jedním směrem.



2. Připojte napájení kabel SAS ke konektoru napájení na napájecí jednotce.



3. Připojte kabel signálu SAS ke konektoru SAS na základní desce.

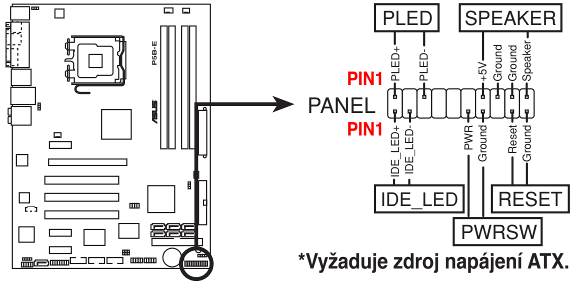


1.8 Kabely předního panelu

Pokyny pro připojení kabelů předního panelu:

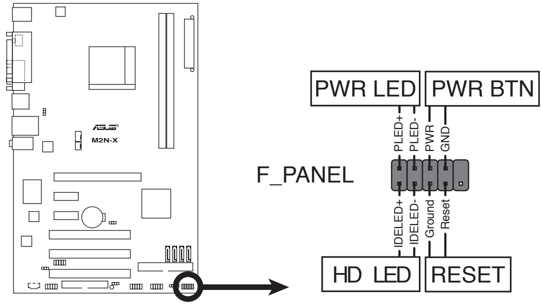
- RESET (resetovací tlačítko)
- PLED (indikátor napájení)
- PWRSW (vypínač)
- IDE_LED (indikátor aktivity pevného disku IDE)
- SPEAKER (konektor reproduktoru)

20-8kolíkový konektor na předním panelu


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
PIN1
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

*Vyžaduje zdroj napájení ATX.

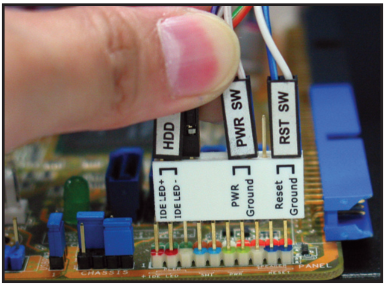
10-1kolíkový konektor na předním panelu


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Kabely předního panelu vaší skříně se mohou lišit podle modelů nebo konstrukcí. Připojte tyto konektory k základní desce podle štítku.
- Pokud indikátory LED nesvítí a umístění kolíku je správné, pravděpodobně jste zaměnili uzemňovací kolíky se signálními kolíky. Bílý vodič obvykle představuje uzemňovací kolíky a barevný vodič představuje signální kolíky.
- Kabely předního panelu SPEAKER, RESET a PWRSW nemají žádnou konkrétní orientaci, zatímco kabely IDE_LED a PLED mají konkrétní orientaci. Připojte kabel PIN1 ke konektoru PIN1 na základní desce.
- Konektor na předním panelu se liší podle modelu základní desky, další informace najdete v uživatelské příručce.

ASUS Q-Connector

Jednoduchá instalace ASUS Q-Connector šetří čas s překonáváním spletitých kabelů předního panelu. Podrobnosti najdete v uživatelské příručce.

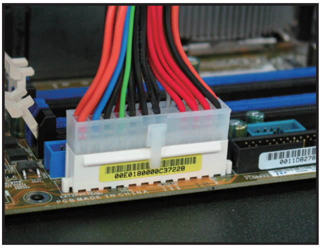


Q-Connector je k dispozici u vybraných modelů. Podrobnosti najdete v uživatelské příručce.

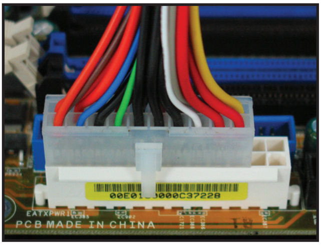
1.9 Připojení napájení ATX

Konektory napájení ATX lze připojit pouze v jedné orientaci. Pomocí boční svorky zavěste konektory na základní desku. NEZATLAČUJTE napájecí zástrčky do napájecích zásuvek na základní desce silou. Na základní desce budou obvykle dva konektory napájení: 24kolíkový a 4kolíkový. Některé starší zdroje napájení mohou mít pouze 20kolíkový konektor napájení, který lze rovněž připojit ke 24kolíkovému konektoru napájení na základní desce.

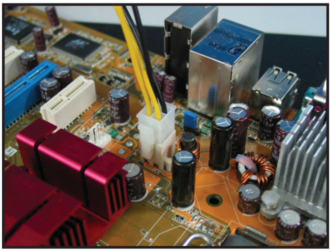
24-pin power connector



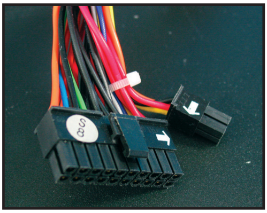
20kolíkový konektor napájení (na 24kolíkové zásuvce)

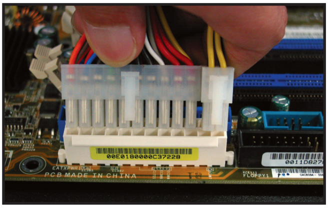


4kolíkový konektor napájení



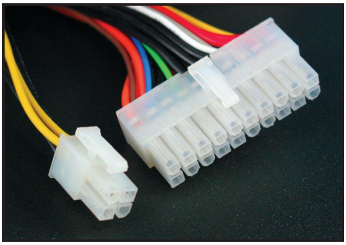
- Při připojování konektorů napájení k základní desce NEPŘIPOJUJTE hlavní přívod napájení.
- Konektory napájení musí být řádně zajištěny k základní desce.
- Pokud váš zdroj napájení podporuje 20kolíkový a 4kolíkový konektor napájení, můžete tyto dva konektory zkombinovat a nainstalovat na základní desku 24kolíkové konektory.



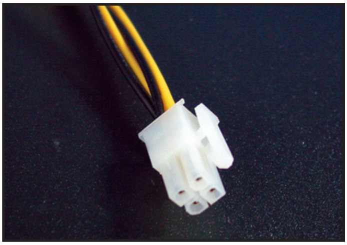


Konektory napájení

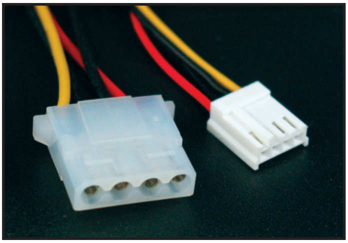
20+4 (24)kolíkový konektor ATX



4kolíkový konektor ATX

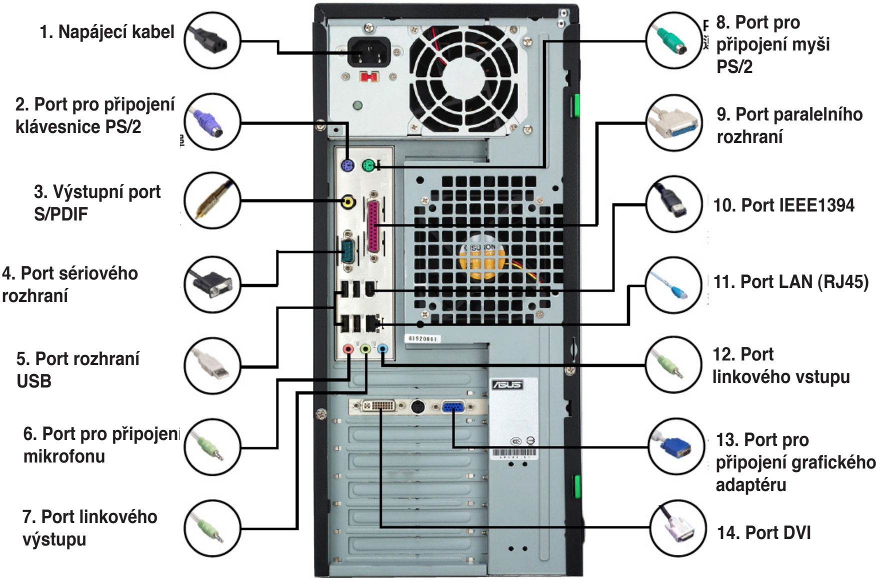


konektor periferního napájení (vlevo)
konektor napájení disketové jednotky (vpravo)



1.10 Periferní zařízení a příslušenství

Na následujícím obrázku jsou zobrazeny možnosti připojení periferních zařízení a příslušenství.


1. Napájecí kabel
2. Port pro připojení klávesnice PS/2
3. Výstupní port S/PDIF
4. Port sériového rozhraní
5. Port rozhraní USB
6. Port pro připojení mikrofonu
7. Port linkového výstupu
8. Port pro připojení myši PS/2
9. Port paralelního rozhraní
10. Port IEEE1394
11. Port LAN (RJ45)
12. Port linkového vstupu
13. Port pro připojení grafického adaptéru
14. Port DVI

1. Napájecí kabel + prodlužovací kabel

2. Port pro připojení klávesnice PS/2 + klávesnice

3. Port výstupu S/PDIF + digitální reproduktorový systém 5.1

4. Port sériového rozhraní + dokovací stanice PDA

5. Port rozhraní USB + zařízení USB

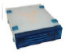
6. Port pro připojení mikrofonu + mikrofon

7. Port linkového výstupu + reproduktor

8. Port pro připojení myši PS/2 + myš

9. Port paralelního rozhraní + tiskárna

10. Port IEEE1394 + externí pevný disk



11. Port LAN (RJ45) + modem

12. Port linkového vstupu + rekordér

13. Port VGA + monitor CRT

14. Port DVI + monitor LCD

Konektory zadního panelu se mohou lišit podle modelu. Podrobnosti najdete v uživatelské příručce.

1.11 První spuštění

Systém poté provede automatické testy po spuštění (POST). Během testů systém BIOS pípá (viz zvukové signály systému BIOS v tabulce níže)

Signály systému BIOS	Popis
Jedno souvislé pípnutí následované třemi krátkými pípnutími	Nebyl rozpoznán žádný grafický adaptér
Jedno souvislé pípnutí následované dvěma krátkými pípnutími a pauzou (opakovaně)	Nebyla rozpoznána žádná paměť.
Jedno souvislé pípnutí následované čtyřmi krátkými pípnutími	Chyba hardwarové součásti (AMI BIOS)
Čtyři krátká pípnutí	Chyba hardwarové součásti (AWARD BIOS)

Odstraňování problémů

Závada	Postup
• Počítač nelze spustit. • Indikátor napájení nesvítí. • Ventilátor napájení nefunguje.	Zkontrolujte, zda je napájecí kabel správně připojen.
Počítač je zapnutý, ale na monitoru se nic nezobrazuje.	• Zkontrolujte, zda je monitor zapnutý a zda je kabel VGA správně připojen. • Upravte jas a kontrast monitoru. • Vypněte počítač a odpojte napájecí kabel. Zkontrolujte, zda je grafická karta správně nainstalována.
Nebyla rozpoznána žádná paměť.	• Zkontrolujte, zda je paměťový modul správný. • Zkontrolujte, zda jsou paměťové moduly DIMM správně usazené v patici DIMM. • Zkontrolujte, zda byl paměťový modul vyroben výrobcem uvedeným v seznamu kvalifikovaných výrobců. Podrobnosti najdete v uživatelské příručce pro QVL.
Chyba disketové jednotky (indikátor vždy svítí nebo se na obrazovce zobrazí varovná zpráva.)	• Zkontrolujte konfiguraci disketové jednotky v systému BIOS. • Zkontrolujte, zda jsou správně připojeny kabely disketové jednotky.
Chyba pevného disku / optického disku (nerozpoznán nebo nezjištěn)	• Zkontrolujte, zda jsou propojky nastaveny správně. (nadřazená/podřazená jednotka) • Zkontrolujte konfiguraci pevného/optického disku v systému BIOS. • Zkontrolujte, zda jsou kabely zařízení řádně připojené. • Zkontrolujte, zda jsou nainstalovány ovladače zařízení.

Kapitola 2: Správa/aktualizace systému BIOS

2.1 Nástroj AFUDOS

Nástroj AFUDOS umožňuje zaktualizovat soubor BIOS v prostředí DOS pomocí spouštěcí diskety se zaktualizovaným souborem BIOS. Tento nástroj rovněž umožňuje zkopírovat aktuální soubor systému BIOS, který můžete použít jako v zálohu v případě selhání systému BIOS nebo poškození během aktualizace.

Kopírování aktuálního souboru systému BIOS

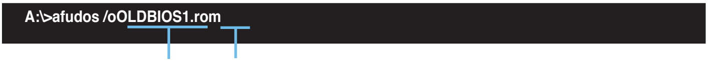
Pokyny pro zkopírování aktuálního souboru systému BIOS pomocí nástroje AFUDOS:

- Zkontrolujte, zda disketa není chráněná proti zápisu a zda obsahuje alespoň 1024 kB volného prostoru pro uložení souboru.
- Následující obrazovky systému BIOS jsou pouze ilustrační. Skutečné obrazovky systému BIOS nemusí být stejné.

1. Zkopírujte nástroj AFUDOS (afudos.exe) z podpůrného disku DVD základní desky na dříve vytvořenou spouštěcí disketu.
2. Spusťte systém v režimu DOS a potom zadejte do příkazového řádku:

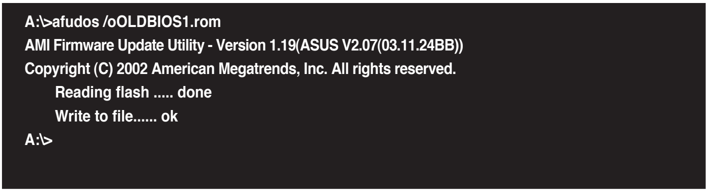
   afudos /o[název souboru]

   kde [název souboru] je jakýkoli uživatelem přiřazený název souboru o délce maximálně osm alfanumerických znaků pro hlavní název souboru a tři alfanumerické znaky pro název přípony.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Stiskněte klávesu <Enter>. Nástroj zkopíruje aktuální soubor systému BIOS na disketu.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

Po zkopírování aktuálního souboru systému BIOS se nástroj vrátí na zobrazení příkazového řádku DOS.

Aktualizace souboru systému BIOS

Pokyny pro aktualizaci souboru systému BIOS pomocí nástroje AFUDOS:

1. Navštivte webové stránky společnosti ASUS (www.asus.com) a stáhněte nejaktuálnější souboru systému BIOS pro základní desku. Uložte soubor systému BIOS na spouštěcí disketu.

Zapište si název souboru systému BIOS na kousek papíru. Přesný název souboru systému BIOS bude třeba zadat do příkazového řádku DOS.

2. Zkopírujte nástroj AFUDOS (afudos.exe) z podpůrného disku DVD základní desky na dříve vytvořenou spouštěcí disketu.
3. Spusťte systém v režimu DOS a potom zadejte do příkazového řádku:

   afudos /i[název souboru]

   kde [název souboru] je nejnovější nebo původní soubor systému BIOS na spouštěcím pevném disku.

```
A:\>afudos /iP5K3D.ROM
```

4. Nástroj ověří soubor a zahájí aktualizaci systému BIOS.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Zapište si název souboru systému BIOS na kousek papíru. Přesný název souboru systému BIOS bude třeba zadat do příkazového řádku DOS.

5. Po dokončení aktualizace systému BIOS se nástroj vrátí na zobrazení příkazového řádku DOS. Restartujte systém z pevného disku.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Nástroj Award BIOS Flash

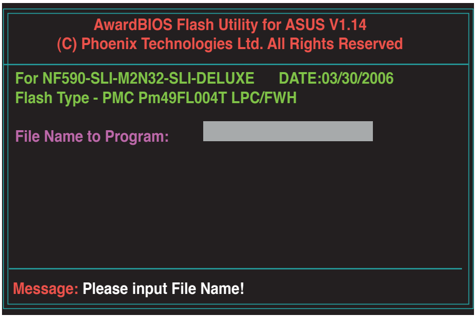
Aktualizace systému BIOS

Systém BIOS (Basic Input/Output System) lze aktualizovat pomocí nástroje AwardBIOS Flash. Při aktualizaci systému BIOS pomocí tohoto nástroje postupujte podle následujících pokynů.

1. Stáhněte si nejnovější soubor systému BIOS z webových stránek společnosti ASUS. Přejmenujte soubor na M2N32SLI.BIN a uložte jej na disketu, disk CD ROM nebo disk USB flash ve **formátu FAT 16/12**.

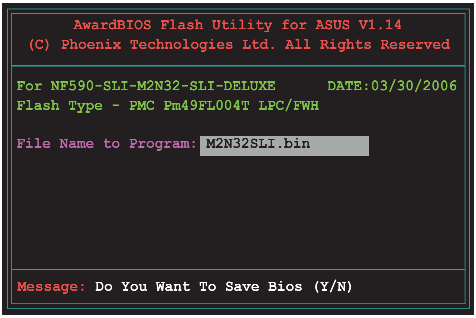
Uložte na disk pouze zaktualizovaný soubor systému BIOS, aby se zabránilo načtení nesprávného souboru systému BIOS.

2. Zkopírujte nástroj AwardBIOS Flash (awdflash.exe) se složky Software podpůrného disku CD na disketu, disk CD ROM nebo disk USB flash s nejnovějším souborem systému BIOS.
3. Spusťte systém v režimu DOS pomocí dříve vytvořené spouštěcí diskety, disku CD ROM nebo disku USB flash.
4. V režimu DOS použijte <X:> (X zastupujte písmeno jednotky) pro přechod na složku na disketě, disku CD ROM nebo disku USB, ve které jste uložili soubor systému BIOS a nástroj Award BIOS Flash.
5. Do příkazového řádku zapište awdflash a stiskněte klávesu <Enter>. Zobrazí se obrazovka nástroje Award BIOS Flash.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

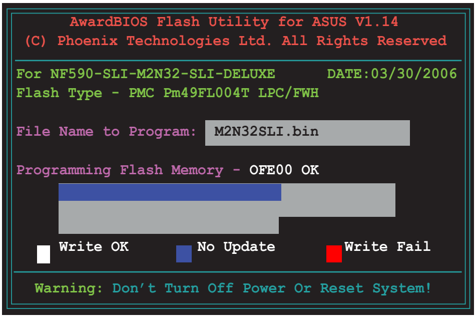
6. Zadejte název souboru systému BIOS do pole File Name to Program (Název souboru programu) a potom stiskněte klávesu <Enter>.



```
          AwardBIOS Flash Utility for ASUS V1.14
      (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Jakmile vás nástroj vyzve k uložení aktuálního souboru systému BIOS, stiskněte klávesu <N>. Zobrazí se následující obrazovka.

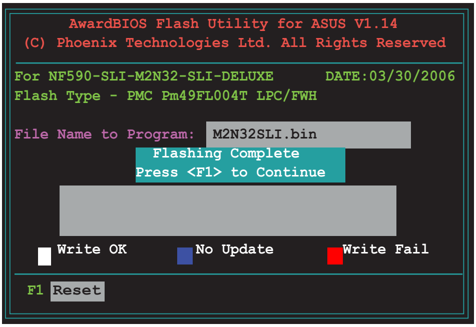
8. Nástroj ověří soubor systému BIOS na disketě, disku CD ROM nebo jednotce USB a začne zavádět soubor systému BIOS do paměti.



```
          AwardBIOS Flash Utility for ASUS V1.14
      (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - 0FE00 OK

  ⬜ Write OK        🟦 No Update        🟥 Write Fail

   Warning: Don't Turn Off Power Or Reset System!
```

Během zavádění do paměti systém NEVYPÍNEJTE ani NERESETUJTE!

9. Po úspěšném dokončení zavádění souboru systému BIOS do paměti nástroj zobrazí zprávu Flashing Complete (Zavádění dokončeno). Vyjměte disk a stisknutím klávesy <F1> restartujte systém.



```
          AwardBIOS Flash Utility for ASUS V1.14
      (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                          Flashing Complete
                        Press <F1> to Continue

  ⬜ Write OK        🟦 No Update        🟥 Write Fail

 F1 Reset
```

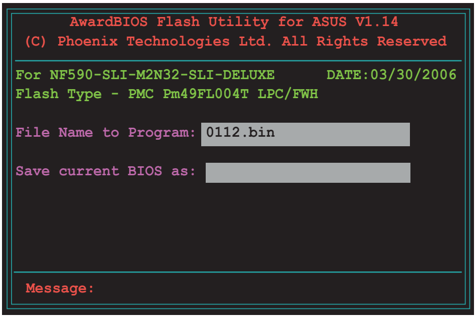
Uložení aktuálního souboru systému BIOS

Pomocí nástroje AwardBIOS Flash můžete uložit aktuální soubor systému BIOS. Aktuální soubor systému BIOS můžete načíst, když během zavádění do paměti dojde k poškození souboru systému BIOS.

Zkontrolujte, zda je na disketě, disku CD ROM nebo na jednotce USB dostatek volného místa pro uložení souboru.

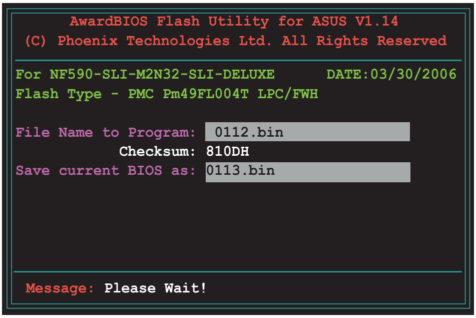
Pokyny pro uložení aktuálního souboru systému BIOS pomocí nástroje AwardBIOS Flash:

1. Proveďte kroky 1 až 6 uvedené v předchozí části.
2. Jakmile vás nástroj vyzve k uložení aktuálního souboru systému BIOS, stiskněte klávesu <Y>. Zobrazí se následující obrazovka.



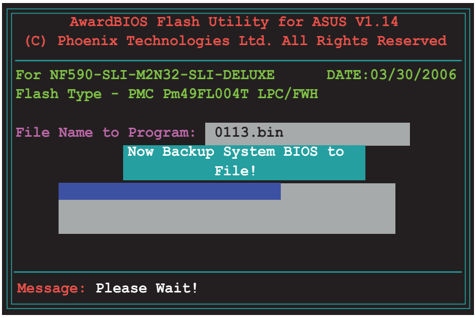
```
         AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Zadejte název aktuálního souboru systému BIOS do pole Save current BIOS as (Uložit aktuální soubor systému BIOS jako) a potom stiskněte klávesu <Enter>.



```
         AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. Nástroj uloží aktuální soubor systému BIOS na disk a potom se vrátí k zavádění systému BIOS do paměti.



```
         AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
            Now Backup System BIOS to
                      File!

Message: Please Wait!
```

2.3 Nástroj ASUS Update

Nástroj ASUS Update umožňuje spravovat, ukládat a aktualizovat systém BIOS základní desky v prostředí Windows®. Nástroj ASUS Update umožňuje:

- ukládání aktuálního souboru systému BIOS,
- stahování nejaktuálnějšího souboru systému BIOS z Internetu,
- aktualizování systému BIOS ze zaktualizovaného souboru systému BIOS,
- aktualizování systému BIOS přímo z Internetu a
- zobrazování informací o verzi systému BIOS.

Tento nástroj je k dispozici na podpůrném disku DVD, které je dodáno v krabici se základní deskou.

Nástroj ASUS Update vyžaduje připojení k Internetu prostřednictvím sítě nebo poskytovatele internetových služeb (ISP).

Instalace nástroje ASUS Update

Pokyny pro instalaci nástroje ASUS Update:

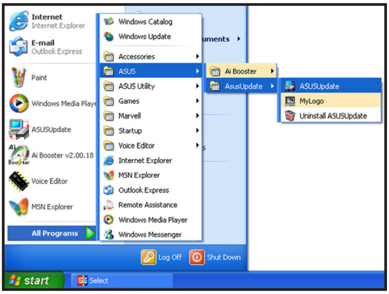
1. Vložte podpůrný disk DVD do optické jednotky.
2. Z nabídky **Main (Hlavní)**, klepněte na kartu Utilities (Nástroje) a potom klepněte na položku Install ASUS Update VX.XX.XX. (Instalovat ASUS Update VX.XX.XX.).
3. Nástroj ASUS Update bude zkopírován do počítače.

Aktualizace systému BIOS prostřednictvím Internetu

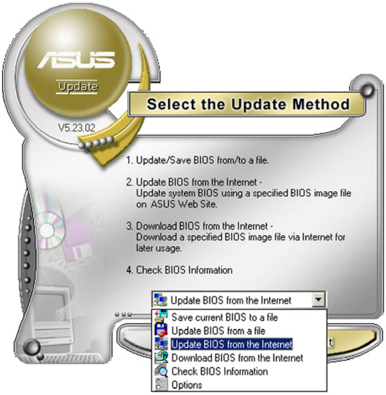
Před aktualizováním systému BIOS pomocí tohoto nástroje ukončete veškeré aplikace Windows®.

Pokyny pro aktualizaci systému BIOS prostřednictvím Internetu:

1. Spusťte nástroj ASUS Update z pracovní plochy Windows® klepnutím na **Start > Programs (Programy) > ASUS > ASUSUpdate > ASUSUpdate.** Zobrazí se hlavní okno nástroje ASUS Update.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

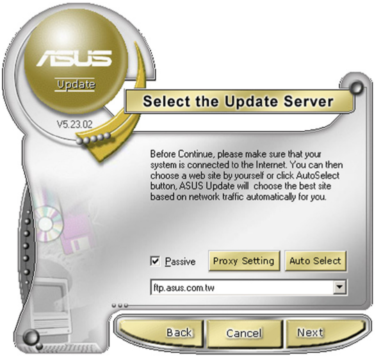
2. Z rozevírací nabídky vyberte **Update BIOS from the Internet (Aktualizovat BIOS z Internetu)** a potom klepněte na tlačítko **Next (Další)**.


ASUS
Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Aby se zabránilo síťovému provozu, vyberte nejbližší server FTP ASUS nebo klepněte na položku **Auto Select** (Vybrat automaticky). Klepněte na tlačítko **Next** (Další).


ASUS
Update
V5.23.02
Select the Update Server

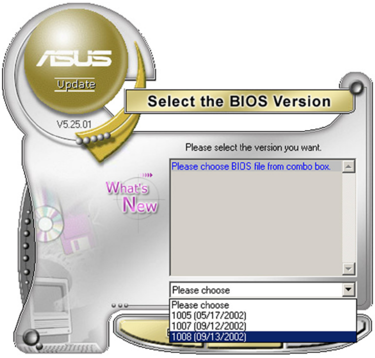
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. Na serveru FTP vyberte verzi systému BIOS, kterou chcete stáhnout. Klepněte na tlačítko **Next** (Další).


ASUS
Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

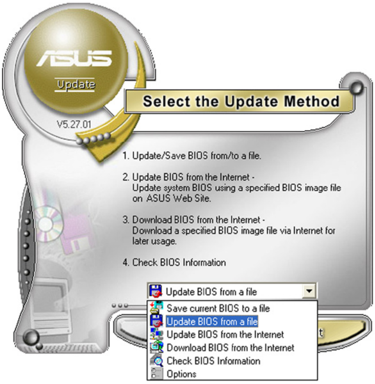
5. Dokončete aktualizaci podle zobrazených pokynů.

Nástroj ASUS Update se dokáže automaticky aktualizovat prostřednictvím Internetu. Aby bylo možné maximálně využívat možností tohoto nástroje, udržujte jej vždy v aktuálním stavu.

Aktualizace systému BIOS prostřednictvím souboru systému BIOS

Pokyny pro aktualizaci systému BIOS prostřednictvím souboru systému BIOS:

1. Spusťte nástroj ASUS Update z pracovní plochy Windows® klepnutím na **Start > Programs (Programy) > ASUS > ASUSUpdate > ASUSUpdate.** Zobrazí se hlavní okno nástroje ASUS Update.
2. Z rozevírací nabídky vyberte **Update BIOS from a file (Aktualizovat BIOS ze souboru)** a potom klepněte na tlačítko **Next (Další)**.

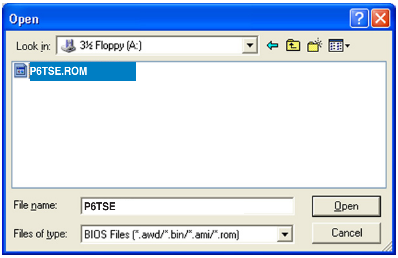


Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

ASUS
Update
V5.27.01
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. V okně Open (Otevřít) vyhledejte soubor systému BIOS a potom klepněte na tlačítko **Open (Otevřít)**.
4. Dokončete aktualizaci podle zobrazených pokynů.



Look in: 3½ Floppy (A:)

P6TSE.ROM

File name: P6TSE

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Open
Open
Cancel

Načtěte výchozí nastavení systému BIOS, aby byla zajištěna kompatibilita a stabilita systému. Vyberte položku **Load Setup Defaults (Načíst výchozí nastavení)** v nabídce **Exit (Konec)**.

2.4 ASUS BIOS Updater

Nástroj ASUS BIOS Updater umožňuje zaktualizovat systém BIOS v prostředí DOS. Tento nástroj rovněž umožňuje zkopírovat aktuální soubor systému BIOS, který můžete použít jako v zálohu v případě selhání systému BIOS nebo poškození během aktualizace.

Následující obrazovky nástroje jsou pouze ilustrační. Skutečné obrazovky nástroje nemusí být stejné.

Před aktualizací systému BIOS

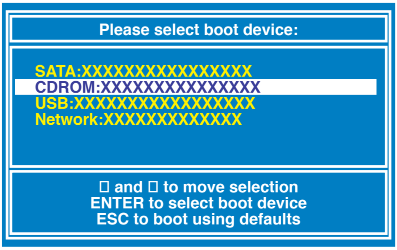
1. Připravte si podpůrný disk DVD pro základní desku a jednotku USB flash ve formátu FAT32/16 a s jedním oddílem.
2. Stáhněte nejaktuálnější soubor systému BIOS a nástroj BIOS Updater z webu společnosti ASUS na adrese http://support.asus.com a uložte je na jednotku USB flash.

- Systém NTFS není podporován v prostředí DOS. Neukládejte soubor systému BIOS a nástroj BIOS Updater na pevný disk nebo jednotku USB flash ve formátu NTFS.
- Neukládejte soubor systému BIOS na disketu z důvodu její nízké kapacity.

3. Vypněte počítač a odpojte všechny pevné disky SATA (volitelně).

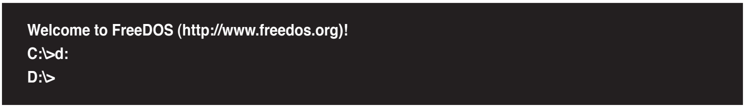
Spuštění systému v prostředí DOS

1. Připojte jednotku USB flash s nejaktuálnějším souborem systému BIOS a nástrojem BIOS Updater do portu USB.
2. Spusťte počítač. Po zobrazení loga společnosti ASUS stisknutím klávesy <F8> zobrazíte **BIOS Boot Device Select Menu (Nabídka výběru spouštěcího zařízení BIOS)**. Vložte podpůrný disk DVD do optické jednotky a vyberte optickou jednotku jako spouštěcí zařízení.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXXX

□ and □ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Když se zobrazí nabídka **Make Disk (Vytvořit disketu)**, vyberte položku **FreeDOS command prompt (Příkazový řádek FreeDOS)** stisknutím čísla položky.
4. Do příkazového řádku FreeDOS zadejte **d:** a stisknutím klávesy <Enter> přepněte z Drive C (Disk C) (optický disk) na Drive D (Disk D) (jednotka USB flash).



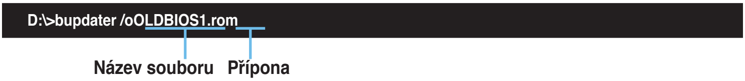
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Zálohování aktuálního systému BIOS

Pokyny pro zálohování aktuálního souboru systému BIOS pomocí nástroje BIOS Updater

Zkontrolujte, zda jednotka USB flash není chráněná proti zápisu a zda obsahuje dostatek volného prostoru pro uložení souboru.

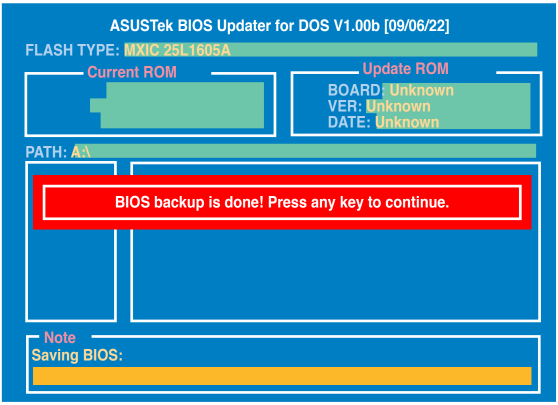
1. Do příkazového řádku FreeDOS zadejte **bupdater /o[název souboru]** a stiskněte klávesu <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

[Název souboru] je jakýkoli uživatelem přiřazený název souboru o délce maximálně osm alfanumerických znaků pro hlavní název souboru a tři alfanumerické znaky pro název přípony.

2. Zobrazí se stránka zálohování nástroje BIOS Updater, která zobrazuje proces zálohování systému BIOS. Po dokončení zálohování systému BIOS se stisknutím libovolné klávesy vrátíte na příkazový řádek systému DOS.



ASUSTek BIOS Updater for DOS V1.00b [09/06/22]

FLASH TYPE: MXIC 25L1605A

Current ROM

Update ROM
BOARD: Unknown
VER: Unknown
DATE: Unknown

PATH: A:\

BIOS backup is done! Press any key to continue.

Note
Saving BIOS:

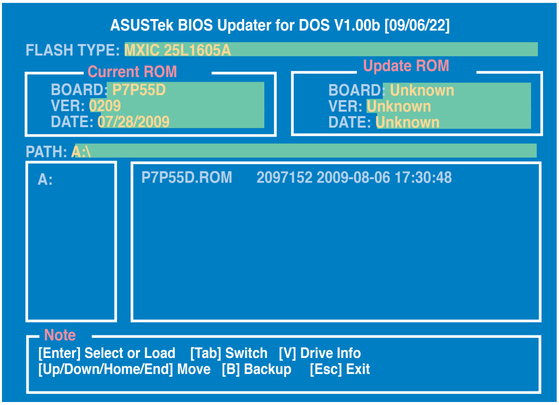
Aktualizace souboru systému BIOS

Pokyny pro aktualizaci souboru BIOS pomocí nástroje BIOS Updater

1. Do příkazového řádku FreeDOS zadejte **bupdater /pc /g** a stiskněte klávesu <Enter>.

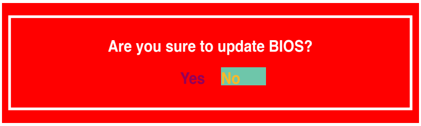
```
D:\>bupdater /pc /g
```

2. Zobrazí se následující obrazovka nástroje BIOS Updater.



```
              ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
         Current ROM                              Update ROM
   BOARD: P7P55D                           BOARD: Unknown
   VER: 0209                               VER: Unknown
   DATE: 07/28/2009                        DATE: Unknown
PATH: A:\
  A:             P7P55D.ROM     2097152 2009-08-06 17:30:48

   Note
  [Enter] Select or Load   [Tab] Switch   [V] Drive Info
  [Up/Down/Home/End] Move  [B] Backup     [Esc] Exit
```

3. Stisknutím <tabulátoru> můžete přepínat mezi poli a pomocí kláves <Nahoru/Dolů/Home/End> vyberte soubor systému BIOS a stiskněte klávesu <Enter>. Nástroj BIOS Updater zkontroluje vybraný soubor systému BIOS a vyzve vás, abyste potvrdili aktualizaci systému BIOS.



```
Are you sure to update BIOS?
        Yes   No
```

4. Vyberte **Yes (Ano)** a stiskněte klávesu <Enter>. Po dokončení aktualizace systému BIOS ukončete nástroj BIOS Updater stisknutím klávesy <ESC>. Restartujte počítač.

Během aktualizace systému BIOS NEVYPÍNEJTE ANI NERESETUJTE počítač, aby se zabránilo selhání při spouštění!

- V případě nástroje BIOS Updater verze 1.04 nebo pozdější se nástroj po aktualizaci systému BIOS automaticky ukončí na příkazový řádek systému DOS.
- Načtěte výchozí nastavení systému BIOS, aby byla zajištěna kompatibilita a stabilita systému. Vyberte položku **Load Setup Defaults (Načíst výchozí nastavení)** v nabídce **Exit (Konec)** systému BIOS. Podrobnosti viz Kapitola 3 uživatelské příručky k vaší základní desce.
- Po zaktualizování souboru systému BIOS nezapomeňte připojit všechny pevné disky SATA (pokud jste je předtím odpojili).

Kapitola 3: Odstraňování problémů

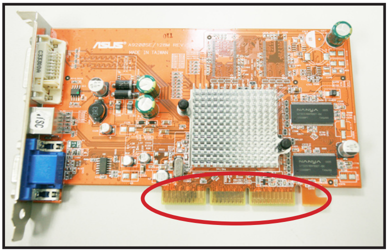
3.1 Odstraňování problémů základní desky DIY

Po sestavení vlastního počítače se můžete po spuštění setkat s problémy. Tato kapitola obsahuje odpovědi na časté dotazy ohledně počítače před načtením operačního systému. V této kapitole najdete základní pokyny pro odstraňování problémů. Ušetříte tím čas a nepříjemnosti při kontaktování týmu odborné pomoci ASUS nebo při vrácení výrobku k záruční opravě.

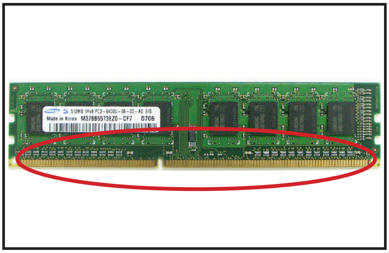
3.1.1 Odstraňování základních problémů

A. Špatné zapojení

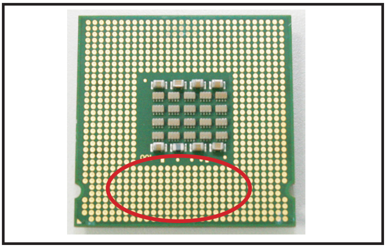
1. Zkontrolujte, zda nejsou zlaté kontakty nebo kolíky znečištěné.
2. Pomocí bavlněného hadříku nebo gumy opatrně očistěte zlatý kontakt. Nezapomeňte vyklepnout zbytky gumy.



Zlatý kontakt karty VGA



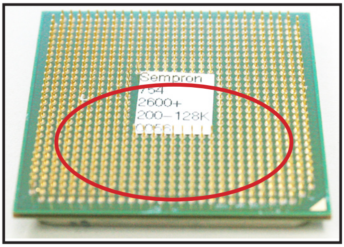
Zlatý kontakt DIMM



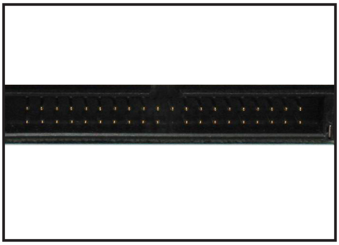
Zlaté kontakty procesoru LGA775

Kartu nebo procesor držte při manipulaci za okraje a NEDOTÝKEJTE se zlatého kontaktu. Statická elektřina vážně poškodí zařízení.

3. Zkontrolujte, zda nejsou kolíky konektorů nebo procesoru zlomené nebo ohnuté. Zlomený nebo ohnutý kolík způsobí nefunkčnost součásti. Další pomoc vám poskytne prodejce.



Zlaté kolíky procesoru AMD

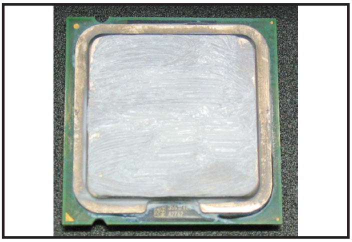


Kolíky konektoru

Pokud došlo ke zlomení nebo ohnutí kolíků po zakoupení, prodejce vás pravděpodobně požádá o uhrazení opravy. V některých případech zlomené nebo ohnuté kolíky NELZE OPRAVIT.

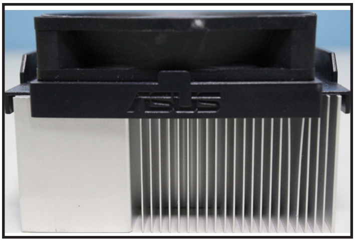
B. Přehřívání procesoru

1. Očistěte povrch procesoru měkkým hadříkem. Naneste několik kapek tepelné pasty na plochu procesoru, se kterou bude tepelná jímka v kontaktu. Rozprostřete pastu do rovnoměrné tenké vrstvy.

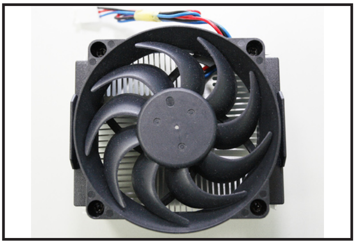


Povrch procesoru

2. Zkontrolujte, zda tepelná jímka ani ventilátor nejsou znečištěné.



Boční pohled na tepelnou jímku a ventilátor



Pohled shora na tepelnou jímku a ventilátor

3. Podle pokynů výrobců tepelné jímky a ventilátoru odstraňte znečištění, které zpomaluje otáčení ventilátoru.

3.2 Další běžné problémy

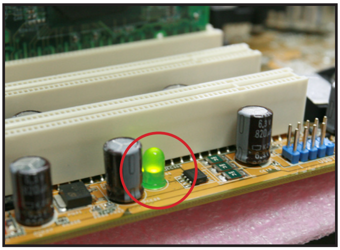
- Před odnímáním zařízení ze systému opojte veškeré napájecí kabely.
- Všechny chybové zprávy budou zobrazeny na displeji během automatického testu po spuštění (POST).
- Pokud systém BIOS vydává zvukové signály, podrobnosti viz část 1.11.
- Projděte kontrolní seznam níže.

	Kontrolní položky					**Stránka s odkazem**
	Indikátor napájení	**Zobrazení na displeji**	**Tepelná jímka a ventilátor**	**Signál systému BIOS**	**Chybová zpráva**	
Žádné napájení	Nesvítí	Ne	Nespuštěno	Ne	Nezobrazeno	3-4
Žádné zobrazení na displeji	Svítí	Ne	Nespuštěno	Ne	Nezobrazeno	3-5
	Svítí	Ne	Spuštěno	Ne	Nezobrazeno	3-5
	Svítí	Ne	Spuštěno	Ano	Nezobrazeno	3-5
Chyba při načtení operačního systému	Svítí	Ano	Spuštěno	Ano	Ano	3-5
	Svítí	Ano	Spuštěno	Ne	Ano	3-5
	Svítí	Ano	Spuštěno	Ne	Ne	3-5

Pokud byl jeden problém odstraněn, ale objeví se jiný, znovu projděte kontrolní seznam. Pokud problém přetrvává, požádejte o další pomoc prodejce nebo tým odborné pomoci společnosti ASUS.

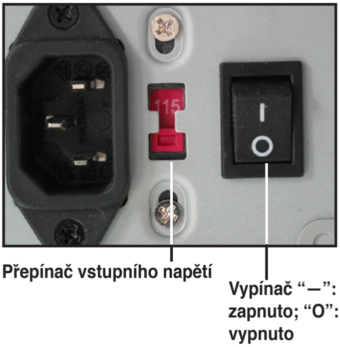
3.2.1 Žádné napájení

Základní desky ASUS jsou vybaveny pohotovostním indikátorem napájení. Když tento indikátor svítí, znamená to, že systém je zapnutý. Pokud tento indikátor nesvítí, odstraňte problém podle pokynů níže.

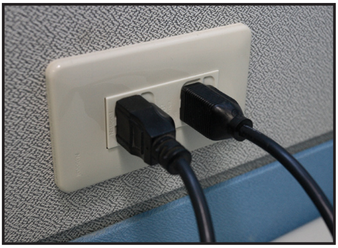


1. Nastavte zdroj napájení na správné vstupní napětí, které je k dispozici ve vaší oblasti, a zkontrolujte, zda je zdroj napájení zapnutý.

   - Před nastavováním vstupního napětí nezapomeňte odpojit napájecí kabel. Zanedbáním tohoto pokynu dojde k vážnému poškození zdroje napájení.
   - Zanedbáním nastavení zdroje napájení na správné vstupní střídavé napětí dojde k závažnému poškození systému.



2. Zkontrolujte, zda je napájecí kabel připojen k elektrické zásuvce.
   - Připojte zástrčku napájecího kabelu přímo do elektrické zásuvky. NEPŘIPOJUJTE zástrčku napájecího kabelu k prodlužovacímu napájecímu kabelu, nepřerušitelnému zdroji napájení (UPS) ani jiným zařízením.
   - Zaměňte zástrčky napájecích kabelů počítače a monitoru a zkontrolujte, zda elektrická zásuvka funguje normálně.



3. Pokud problém přetrvává, kontaktujte prodejce nového zdroje napájení. Pokud zdroj napájení funguje správně, požádejte výrobce základní desky ASUS o záruční opravu.

3.2.2 Chyba při zavádění; žádné zobrazení na displeji

Většina problémů s chybou při zavádění a s žádným zobrazením na displeji je způsobena rozpoznáním zařízení nebo nesprávnou instalací. Při odstraňování tohoto problému postupujte podle následujících pokynů.

1. Zkontrolujte, zda jsou připojeny všechny napájecí kabely, včetně napájecích kabelů počítače a monitoru.
2. Zkontrolujte, zda problém nezpůsobují rozšiřovací zařízení.
    - Vyjměte všechny rozšiřovací karty a zařízení. Znovu spusťte systém sestávající pouze ze základní desky, monitoru, karty VGA, paměťových modulů, zdroje napájení, tepelné jímky a ventilátoru, klávesnice a myši.
    - Pokud systém funguje normálně, způsobuje problém některé z rozšiřujících zařízení. Posupně nainstalujte vyjmutá rozšiřovací zařízení a zjistěte, které zařízení způsobuje problém.
3. Zkontrolujte, zda problém nezpůsobují základní systémová zařízení.
    - Máte-li k dispozici náhradní zařízení, můžete jimi nahrazovat původní zařízení a vyhledat závadné zařízení v pořadí „paměťový modul, procesor, základní deska, pevný disk/optická jednotka, klávesnice/myš."

Když vyhledáte závadné zařízení, požádejte o opravu výrobce zařízení.

3.2.3 Chyba zavedení operačního systému

1. Dojde-li k problému po přidání hardwaru. Odeberete nově přidaný hardware a restartujte systém. Pokud systém pracuje bez hardwaru normálně, je zařízení závadné nebo není kompatibilní se systémem. Požádejte o pomoc prodejce zařízení.
2. Dojde-li k problému po instalaci softwaru nebo ovladače. Při odstraňování tohoto problému postupujte podle následujících pokynů.
    a. Spusťte operační systém v bezpečném režimu a odeberte software nebo ovladač.
    b. Požádejte o další pomoc výrobce operačního systému.
    c. Pokud se nepodaří problém odstranit pomocí předchozích pokynů, pravděpodobně bude třeba pevný disk naformátovat a znovu nainstalovat operační systém.
3. Dojde-li k problému po změně nastavení systému BIOS, restartujte počítač, přejděte do systému BIOS a použijte výchozí nastavení. Podrobnosti viz uživatelská příručka k základní desce.

4. Dojde-li k problému napadením počítačovým virem nebo poškozením souborů, odstraňte problém podle následujících pokynů.
    a. Spusťte operační systém v bezpečném režimu a nechte celý systém prověřit antivirovým programem.
    b. Požádejte o další pomoc výrobce operačního systému.
    c. Pokud se nepodaří problém odstranit pomocí předchozích pokynů, pravděpodobně bude třeba pevný disk naformátovat a znovu nainstalovat operační systém.

3.2.4 Časté dotazy

Otázka 1: Paměť hlášená při testu POST je jiná, než nainstalovaná.

Odpověď 1: Rozdíl v hlášené paměti může být způsoben závadnými paměťovými moduly nebo nesprávnou instalací paměťových modulů DIMM. Zkontrolujte, zda jsou paměťové moduly DIMM v dobrém stavu a zda jsou nainstalovány správně. Podrobnosti viz uživatelská příručka k základní desce. Pokud jste nainstalovali paměť o velikosti 4,0 GB a je hlášeno 3,X GB, je to normální.

Otázka 2: Systém nemůže rozpoznat disketovou jednotku, ale disketová jednotka svítí.

Odpověď 2: Kabely disketové jednotky jsou nesprávně nainstalovány. Červený proužek na kabelu označuje stranu s kolíkem č. 1 a musí odpovídat kolíku č. 1 na disketové jednotce.

Otázka 3: Chyba při spuštění operačního systému po připojení jednotky USB flash nebo externích pevných disků.

Odpověď 3: Když systém rozpozná jednotku USB flash nebo pevné disky s rozhraním USB, může změnit prioritu spouštěcích zařízení. Odpojte zařízení USB a restartujte systém.

Otázka 4: Při instalaci operačního systému Windows XP nejsou rozpoznány pevné disky nainstalované na řadiči RAID.

Odpověď 4: Pevné disky nejsou rozpoznány, protože operační systém Windows XP neobsahuje ovladač řadiče RAID. Zkopírujte ovladač řadiče RAID na disketu a při spouštění počítače pomocí disku Windows XP stisknutím klávesy <F6> načtěte ovladač z diskety. Podrobnosti viz uživatelská příručka k základní desce.

Kapitola 4: Tipy pro údržbu počítače

4.1 Správná údržba počítače

Osobní počítač je jako ostatní domácí spotřebiče. Udržujte počítač mimo vlhkost, přímé sluneční záření a zdroje statické energie. Aby nedošlo k poškození, nehýbejte se zapnutým počítačem. Prach uvnitř počítače negativně ovlivňuje fungování pevného disku a přispívá k přehřívání, což může způsobit selhání počítače nebo poškození součástí.

4.2 Základní pokyny

1. Pokud počítač nepoužíváte, umístěte jej do obalu proti prachu.
2. Během používání počítač neumísťujte žádné předměty na monitor, aby nedošlo k zablokování větracích otvorů. Nadměrné teplo způsobí poruchu monitoru.
3. Neumísťujte počítač příliš blízko zdi a ponechte dostatečný prostor pro rozptyl tepla. Přehřívání způsobí selhání systému.
4. Počítač umístěte na stabilní povrch.
5. Udržujte počítač mimo oblasti s extrémní teplotou. Optimální okolní teplota je 5°C až 30°C. Pro zajištění lepšího rozptylu tepla používejte klimatizaci nebo elektrický ventilátor.
6. Uspořádejte ploché kabely tak, aby se zabránilo nedostatečnému průtoku vzduchu.

4.3 Pokyny pro používání

1. Počítač pravidelně zapínejte a vypínejte. Je-li třeba, aby byl počítač spuštěný delší dobu, použijte lepší systémový ventilátor/ventilátor procesoru a vysokonapěťový zdroj napájení.
2. Náhlý výpadek napájení poškodí pevný disk. Je-li napájení nestabilní, doporučujeme připojit k počítači nepřerušitelný zdroj napájení.
3. Pravidelně přeorganizovávejte datové soubory, vyhledávejte viry, obnovujte virové kódy a defragmentujte disk.
4. Počítač pravidelně zbavujte prachu a čistěte. (Před čištěním odpojte všechny napájecí kabely.)
    - Vymontujte základní desku a pevný disk/optickou jednotku a očistěte je stlačeným vzduchem a měkkým štětcem.
    - Odstraňte prach a zbytky vlasů na zdroji napájení antistatickou vakuovou pumpou.

4.4 Tipy

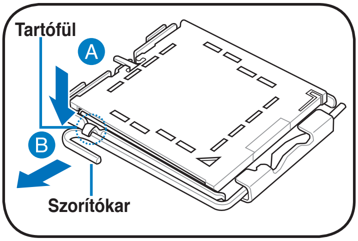
1. Nebudete-li počítač delší dobu používat, vložte do skříně přípravek na absorbování vlhkosti, aby se zabránilo poškození vlhkostí.
2. V některých horkých a vlhkých klimatických oblastech doporučujeme zapnout počítač alespoň jednou týdně. Tím rovněž zabráníte poškození vlhkostí.

1. fejezet: Első lépések

1.1 A CPU beszerelése

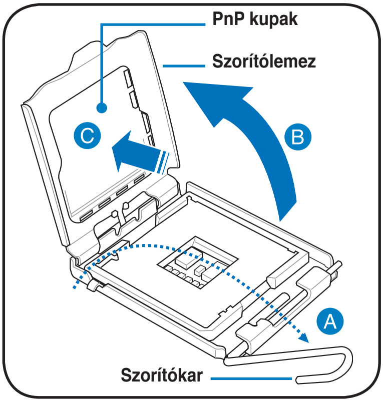
1.1.1 Intel® LGA775 foglalat

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Nyomja le a szorítólemezt a hüvelykujjával (A), majd mozgassa balra (B), amíg az le nem pattan a rögzítőfülről.

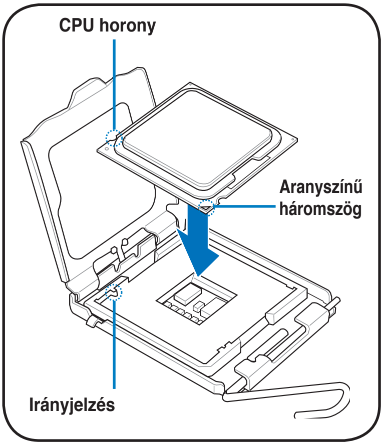


Ahhoz, hogy elkerülje a foglalat lábainak sérülését, ne távolítsa el a PnP kupakot, hacsak nem a CPU beszerelését végzi.

3. Emelje fel a szorítókart a nyíl irányába, hogy az 135º fokos szögben álljon.
4. Emelje fel a szorítólemezt a hüvelyk- és mutatóujjával, majd állítsa 100º fokos szögbe(4A). majd csúsztassa le a PnP kupakot a szorítólemez nyílásáról, hogy eltávolítsa (4B).

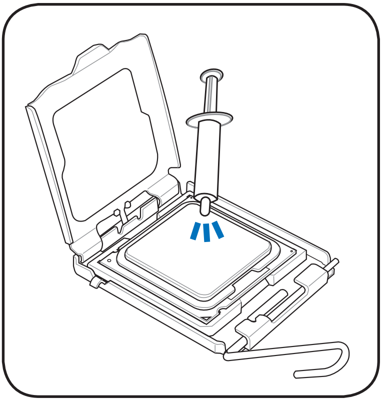


5. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal alsó sarkánál legyen, majd illessze a foglalat irányjelzését a CPU bevágásába.



A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!

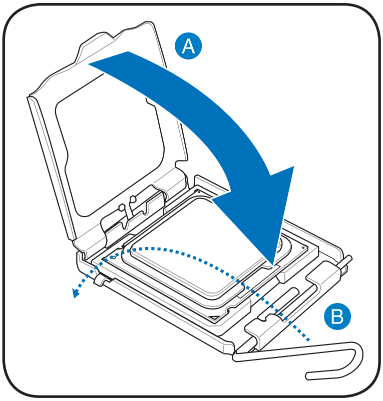
6. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

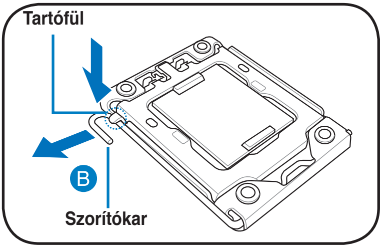
7. Zárja le a szorítólemezt (A), majd hajtsa le a szorítókart (B), amíg az a rögzítőfülre nem pattan.



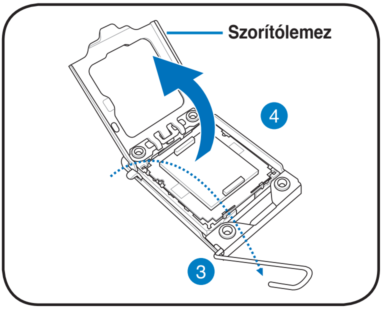
1.1.2 Intel® LGA1366 foglalat

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Nyomja le a szorítólemezt a hüvelykujjával (A), majd mozgassa balra (B), amíg az le nem pattan a rögzítőfülről.

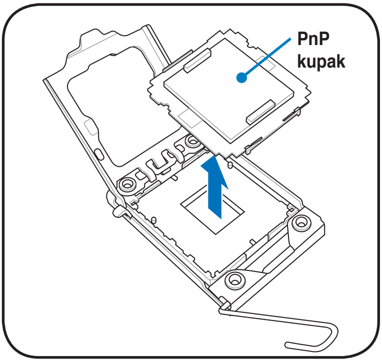
Ahhoz, hogy elkerülje a foglalat lábainak sérülését, ne távolítsa el a PnP kupakot, hacsak nem a CPU beszerelését végzi.



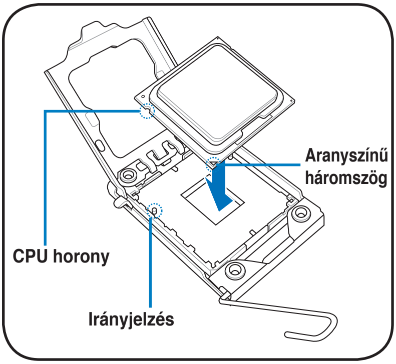
3. Emelje fel a szorítókart a nyíl irányába, hogy az 135º fokos szögben álljon.
4. Emelje fel a szorítólemezt a hüvelyk- és mutatóujjával, majd állítsa 100º fokos szögbe.



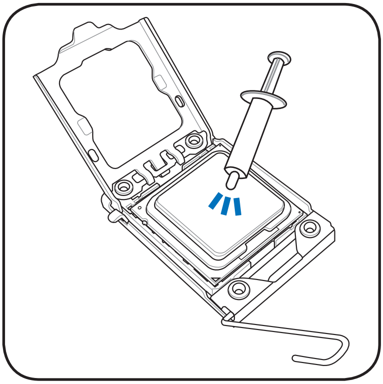
5. Távolítsa el a PnP kupakot a CPU-foglalatról.



6. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal alsó sarkánál legyen, majd illessze a foglalat irányjelzését a CPU bevágásába.



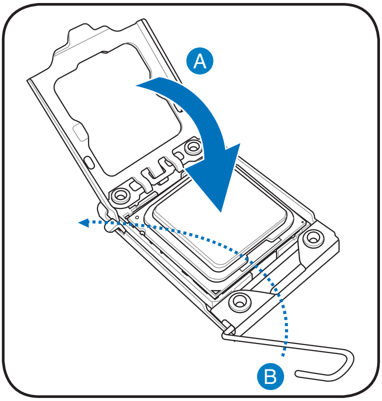
7. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

8. Zárja le a szorítólemezt (A), majd hajtsa le a szorítókart (B), amíg az a rögzítőfülre nem pattan.

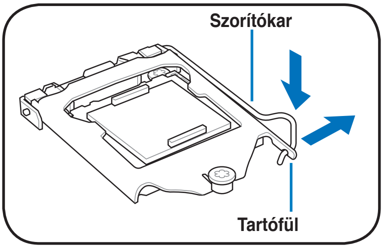


1.1.3 Intel® LGA1156 foglalat

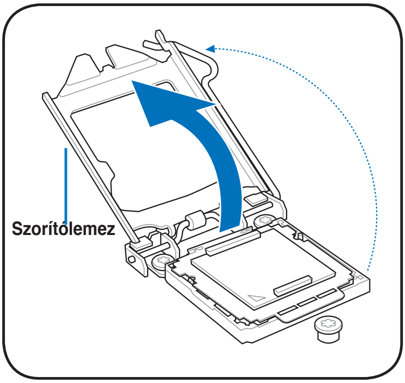
Az LGA1155 CPU nem kompatibilis az LGA1156 foglalattal. NE szereljen LGA1155 CPU-t az LGA1156 foglalatba.

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Nyomja le a szorítókart a hüvelykujjával (A), majd mozgassa jobbra (B), amíg az le nem pattan a rögzítőfülről.

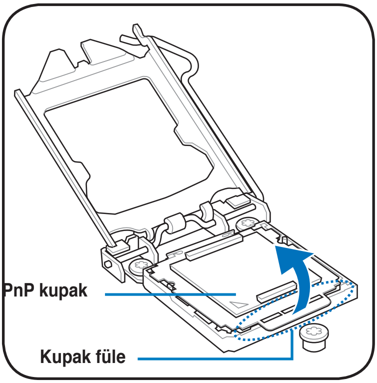
Ahhoz, hogy elkerülje a foglalat lábainak sérülését, ne távolítsa el a PnP kupakot, hacsak nem a CPU beszerelését végzi.



3. Emelje fel a szorítókart a nyíl irányába, amíg a tartólemez teljesen felemelkedik.

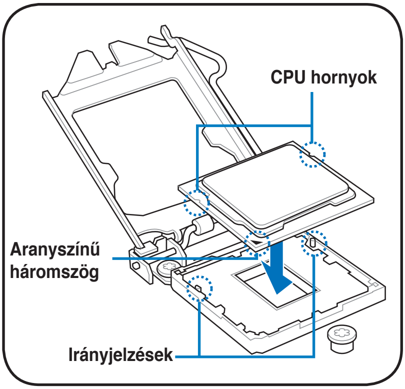


4. A PnP kupakot a kizárólag a fülnél emelve távolítsa el a CPU-foglalatról.



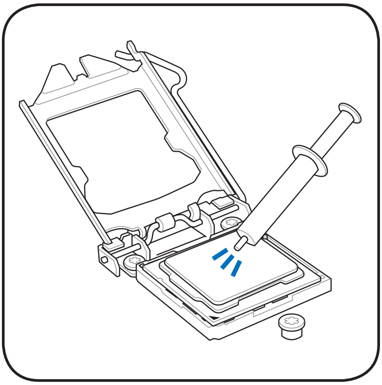
Magyar

5. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal- alsó sarkánál legyen, majd illessze a foglalat irányjelzéseit a CPU hornyaihoz.



A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!

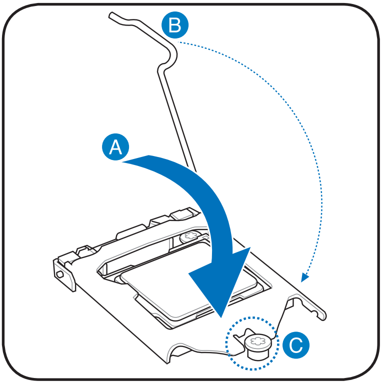
6. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



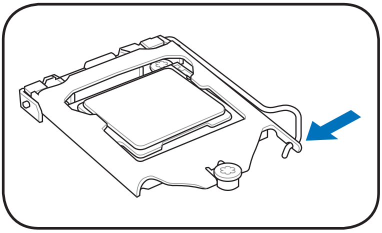
Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

7. Zárja le a szorítólemezt (A), majd hajtsa le a szorítókart (B) meggyőződve arról, hogy a szorítólemez elülső széle a rögzítőfül (C) alá pattant.



8. A rögzítőkart hajtsa a tartófül alá.

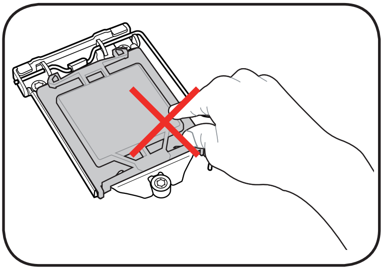


1.1.4 Intel® LGA1155 foglalat (PnP védősapka a terhelőlemezen)

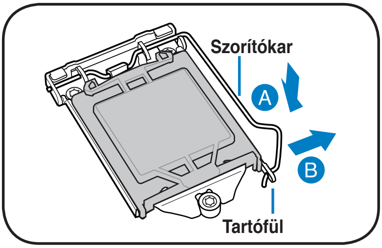
Az LGA1156 CPU nem kompatibilis az LGA1155 foglalattal. NE szereljen LGA1156 CPU-t az LGA1155 foglalatba.

1. Keresse meg a CPU-foglalatot az alaplapon.

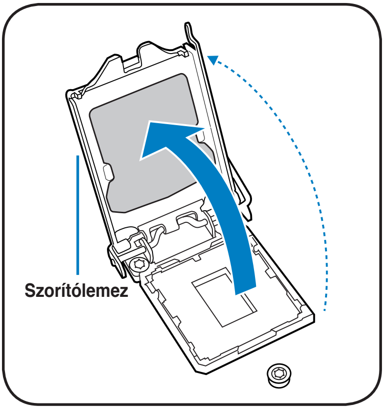
2. A processzor telepítése előtt ne távolítsa el a PnP védősapkát a processzoraljzatról.



3. Nyomja le a szorítókart a hüvelykujjával (A), majd mozgassa jobbra (B), amíg az le nem pattan a rögzítőfülről.

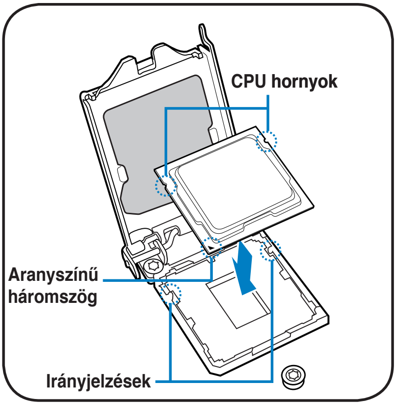


4. Emelje fel a szorítókart a nyíl irányába, amíg a tartólemez teljesen felemelkedik.

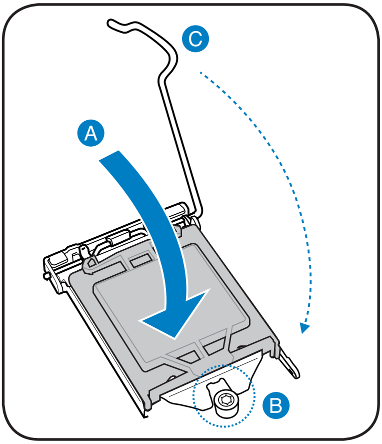


5. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal- alsó sarkánál legyen, majd illessze a foglalat irányjelzéseit a CPU hornyaihoz.

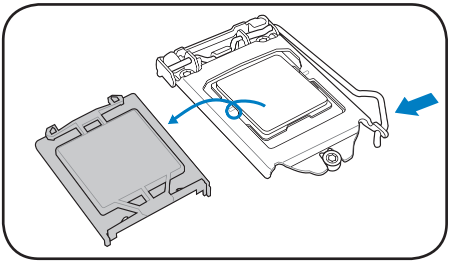
A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!



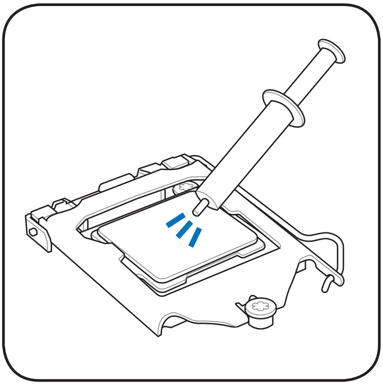
6. Zárja vissza a terhelőlemezt (A) oly módon, hogy a lemez elülső széle a tartózár (B) alá csússzon. Ezután tolja le a terhelőkart (C).



7. Helyezze be a terhelőkart a tartófül alá, így eltávolíthatja a PnP védősapkát a processzoraljzatról.



8. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

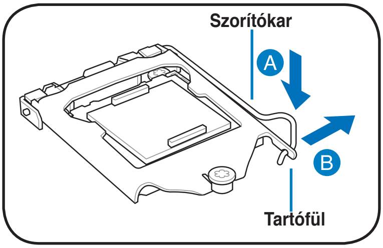
1.1.5 Intel® LGA1155 foglalat (PnP védősapka a terhelőlemez alatt)

Az LGA1156 CPU nem kompatibilis az LGA1155 foglalattal. NE szereljen LGA1156 CPU-t az LGA1155 foglalatba.

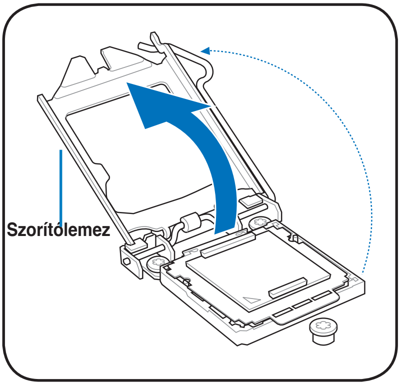
1. Keresse meg a CPU-foglalatot az alaplapon.

2. Nyomja le a szorítókart a hüvelykujjával (A), majd mozgassa jobbra (B), amíg az le nem pattan a rögzítőfülről.

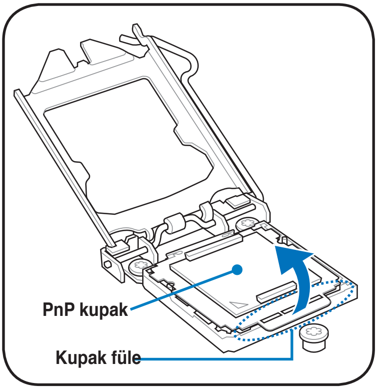
Ahhoz, hogy elkerülje a foglalat lábainak sérülését, ne távolítsa el a PnP kupakot, hacsak nem a CPU beszerelését végzi.



3. Emelje fel a szorítókart a nyíl irányába, amíg a tartólemez teljesen felemelkedik.

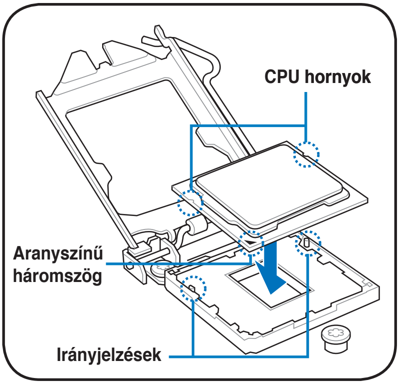


4. A PnP kupakot a kizárólag a fülnél emelve távolítsa el a CPU-foglalatról.



5. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal- alsó sarkánál legyen, majd illessze a foglalat irányjelzéseit a CPU hornyaihoz.

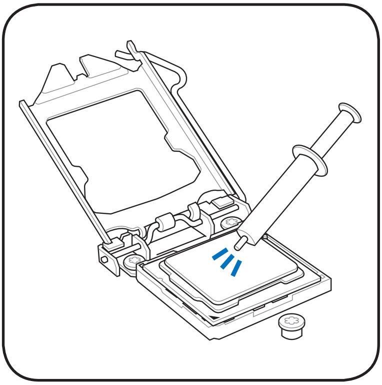
A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!



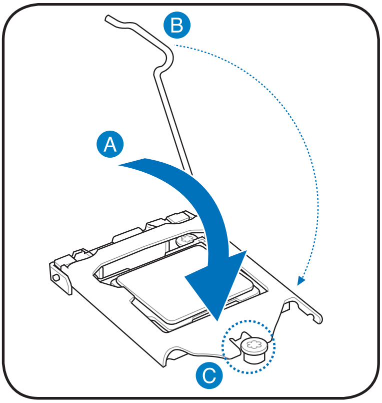
6. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.

Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

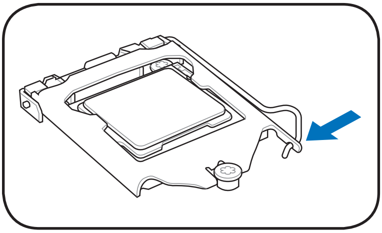
A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.



7. Zárja le a szorítólemezt (A), majd hajtsa le a szorítókart (B) meggyőződve arról, hogy a szorítólemez elülső széle a rögzítőfül (C) alá pattant.

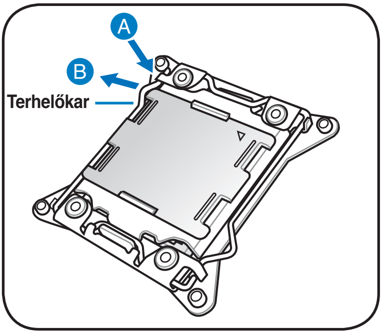


8. A rögzítőkart hajtsa a tartófül alá.



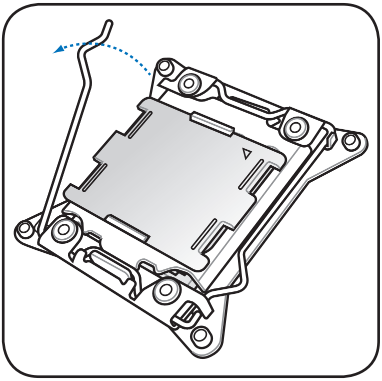
1.1.6 Intel® LGA2011 foglalat

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Nyomja le a szorítólemezt a hüvelykujjával (A), majd mozgassa balra (B), amíg az le nem pattan a rögzítőfülről.

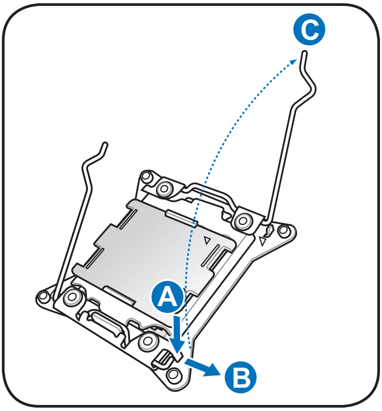


Ahhoz, hogy elkerülje a foglalat lábainak sérülését, ne távolítsa el a PnP kupakot, hacsak nem a CPU beszerelését végzi.

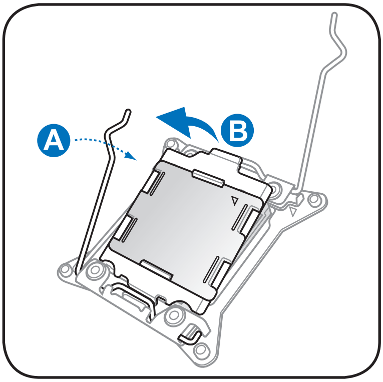
3. Emelje meg enyhén a terhelőkart a nyíl irányába.



4. Zárja le a szorítólemezt (A), majd hajtsa le a szorítókart (B) meggyőződve arról, hogy a szorítólemez elülső széle a rögzítőfül (C). Emelje meg enyhén a terhelőkart a nyíl irányába (C).

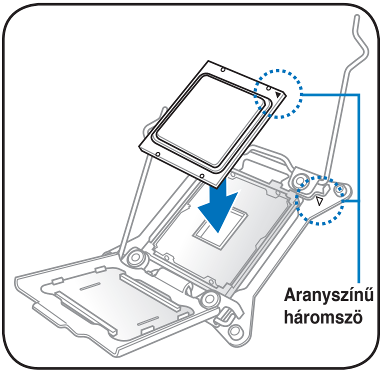


5. Tolja a bal terhelőkart (A) a terhelőlemez (B) megemeléséhez.

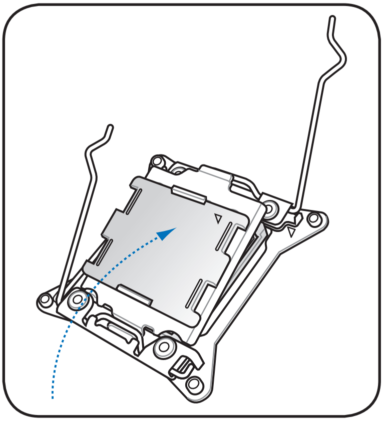


6. Lgazítsa a processzort az aljzat fölé oly módon, hogy a háromszög jelölés az aljzat jobb felső sarka fölött legyen.

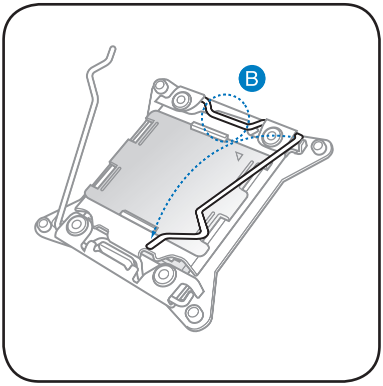
A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!



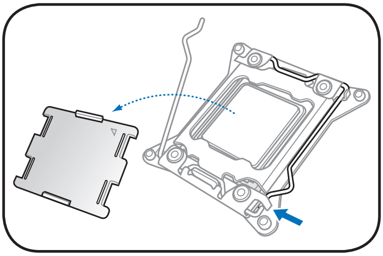
7. Zárja be a teherbírási adatlappal.



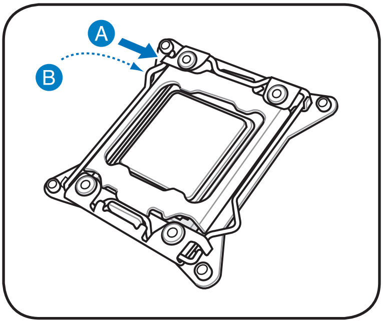
8. Tolja lefelé a terhelőkart (A), és győződjön meg arról, hogy a terhelőlemez széle a kar (B) által rögzítve van.



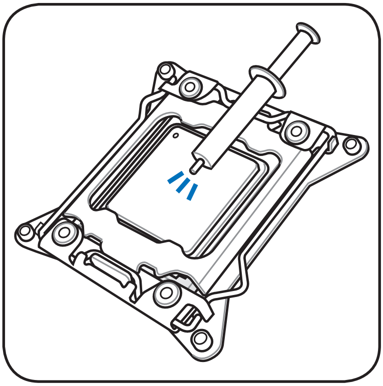
9. Helyezze be a terhelőkart a tartófül alá. Távolítsa el a PnP védősapkát a processzoraljzatról.



10. Tolja lefelé a terhelőkart (A), majd helyezze be a kart a tartófül (B) alá.



11. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.

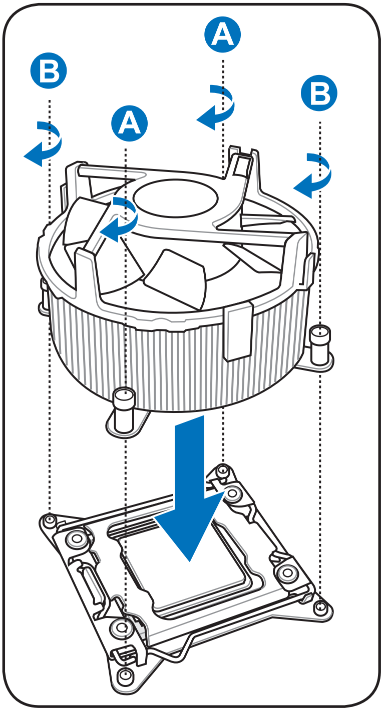


Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

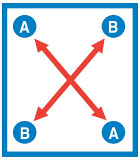
A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

12. Helyezze a hűtőelemet a processzor tetejére. Győződjön meg arról, hogy a négy rögzítőelem megfelelően illeszkedik a processzoraljzat nyílásaiba.

13. Helyezze a hűtőelemet a processzor tetejére. Győződjön meg arról, hogy a négy rögzítőelem megfelelően illeszkedik a processzoraljzat nyílásaiba.



Húzza meg a négy hűtőelem csavarjait átlósan.

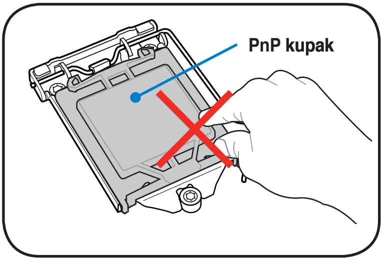


1.1.7 Intel® LGA1150 foglalat (PnP védősapka a terhelőlemezen)

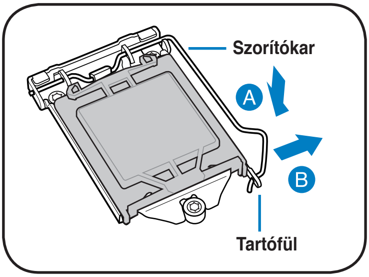
Győződjön meg arról, hogy olyan CPU-t szerel be, amelyet LGA1150 foglalathoz terveztek. NE szereljen LGA1155 vagy LGA1156 foglalatba tervezett CPU-t az LGA1150 foglalatba.

1. Keresse meg a CPU-foglalatot az alaplapon.

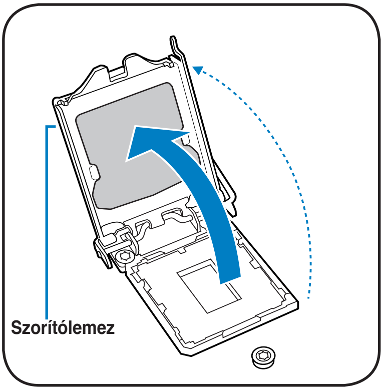
Még NE távolítsa el a PnP kupakot a CPU-foglalatról. Ellenkező esetben a foglalat érintkezőtűi elgörbülhetnek. A PnP védőkupak helyét illetően lásd az alábbi ábrát.



2. Nyomja le a szorítókart a hüvelykujjával (A), majd mozgassa jobbra (B), amíg az le nem pattan a rögzítőfülről.



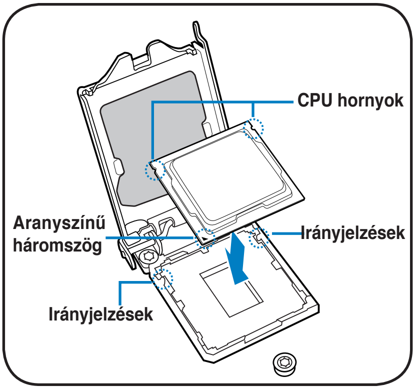
3. Emelje fel a szorítókart a nyíl irányába, amíg a tartólemez teljesen felemelkedik.



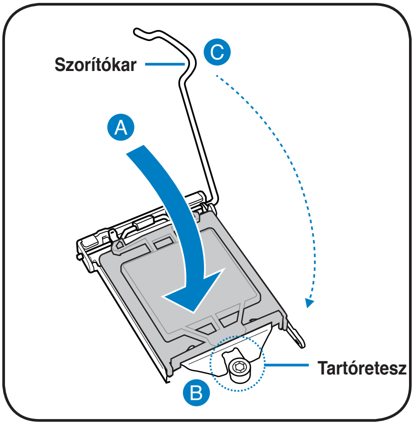
Magyar

4. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal- alsó sarkánál legyen, majd illessze a CPU bevágásait a foglalat irányjelzéseihez.

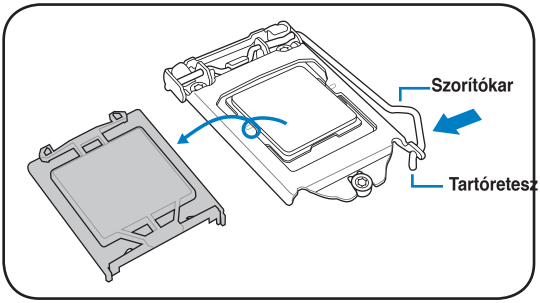
A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!


CPU hornyok
Aranyszínű háromszög
Irányjelzések
Irányjelzések

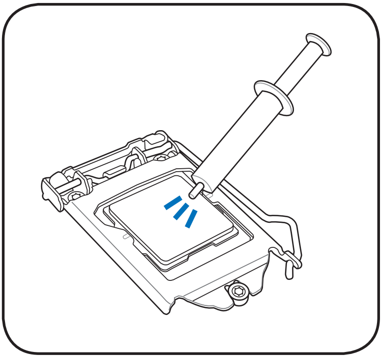
5. Zárja vissza a terhelőlemezt (A) oly módon, hogy a lemez elülső széle a tartózár (B) alá csússzon. Ezután tolja le a terhelőkart (C).


Szorítókar
C
A
Tartóretesz
B

6. Helyezze be a terhelőkart a tartófül alá, így eltávolíthatja a PnP védősapkát a processzoraljzatról.


Szorítókar
Tartóretesz

7. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



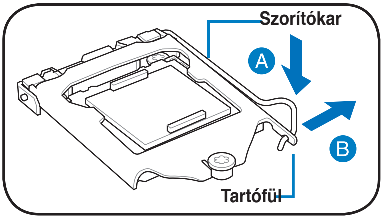
Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

1.1.8 Intel® LGA1150 foglalat (PnP védősapka a terhelőlemez alatt)

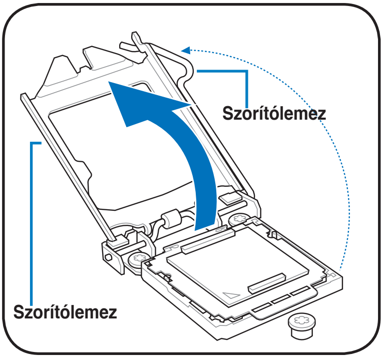
Győződjön meg arról, hogy olyan CPU-t szerel be, amelyet LGA1150 foglalathoz terveztek. NE szereljen LGA1155 vagy LGA1156 foglalatba tervezett CPU-t az LGA1150 foglalatba.

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Nyomja le a szorítókart a hüvelykujjával (A), majd mozgassa jobbra (B), amíg az le nem pattan a rögzítőfülről.

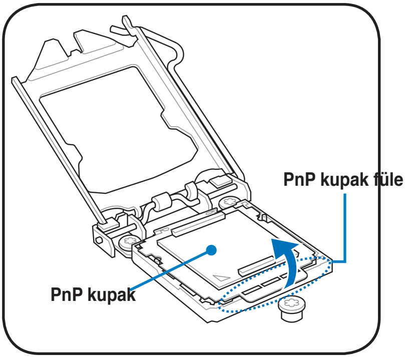


Még NE távolítsa el a PnP kupakot a CPU-foglalatról. Ellenkező esetben a foglalat érintkezőtűi elgörbülhetnek.

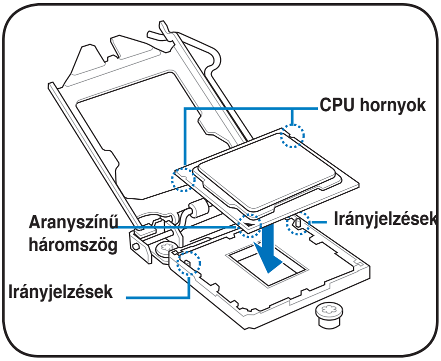
3. Emelje fel a szorítókart a nyíl irányába, amíg a tartólemez teljesen felemelkedik.



4. A PnP kupakot a kizárólag a fülnél emelve távolítsa el a CPU-foglalatról.

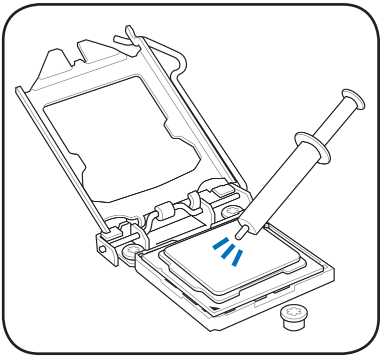


5. Úgy állítsa be a CPU-t a foglalat fölött, hogy az aranyszínű háromszöggel jelölt sarka a foglalat bal- alsó sarkánál legyen, majd illessze a CPU bevágásait a foglalat irányjelzéseihez.


CPU hornyok
Aranyszínű háromszög
Irányjelzések
Irányjelzések

A CPU csak egy irányban illeszkedik megfelelően a foglalatba. NE erőltesse a CPU-t a foglalatba, mivel elhajlíthatja a foglalat lábait és megrongálhatja a CPU-t!

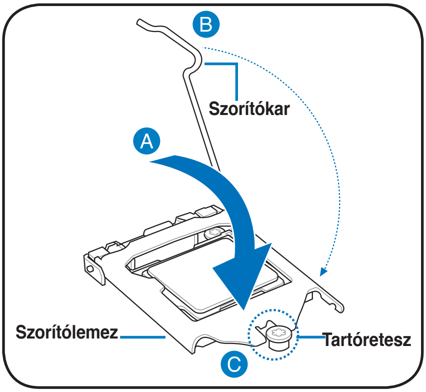
6. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



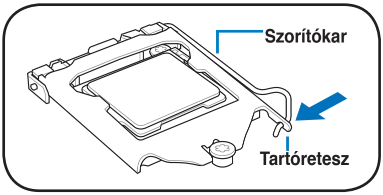
Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

7. Zárja le a szorítólemezt (A), majd hajtsa le a szorítókart (B) meggyőződve arról, hogy a szorítólemez elülső széle a rögzítőfül (C) alá pattant.


B
Szorítókar
A
Szorítólemez
Tartóretesz
C

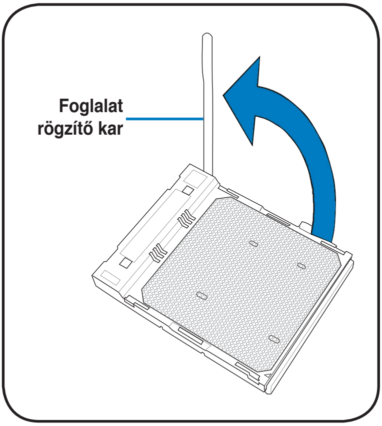
8. A rögzítőkart hajtsa a tartófül alá.


Szorítókar
Tartóretesz

1.1.9 AMD AM2 / AM2+ / AM3 foglalat

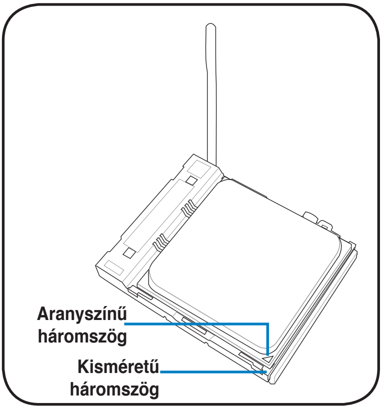
- Az AMD AM2 és AM2+ foglalatok az AMD AM2, AM2+, illetve AM3 processzorokkal kompatibilisek.
- Az AMD AM3 foglalat az AMD AM3 processzorokkal kompatibilis. Az AMD AM2+ / AM2 processzorokat ne telepítse az AM3 aljzathoz. Csak bizonyos AM3 alaplap-típusok támogatják az AM3+ processzorok használatát a BIOS frissítésével. Részletekért tekintse meg az ASUS támogatási oldalát.

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Tolja el oldalirányban a kart, hogy oldja a foglalat rögzítését, majd emelje fel, hogy 90º fokos szögben álljon.

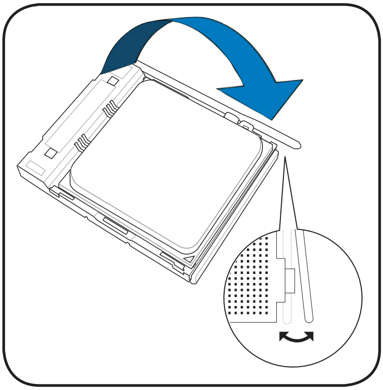


Győződjön meg arról, hogy a foglalat karja 90º fokos szögben áll. Ellenkező esetben a CPU nem fog megfelelően illeszkedni.

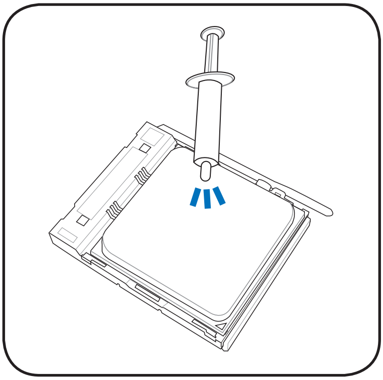
3. Helyezze a CPU-t a foglalatra úgy, hogy az CPU-n lévő aranyszínű háromszög egybeessen a foglalat kis háromszöggel jelölt sarkával.
4. Óvatosan helyezze a CPU-t a foglalatba, amíg a helyére nem illeszkedik.



5. Ha a CPU megfelelően a helyére illeszkedik, hajtsa le a kart a CPU rögzítéséhez. A kar a foglalat oldalán lévő fül mögé pattan rögzített helyzetbe.



6. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

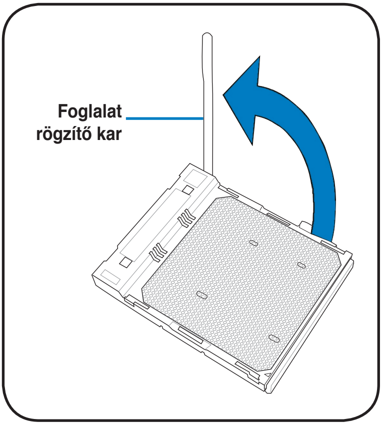
Magyar

1.1.10 AMD AM3+ foglalat

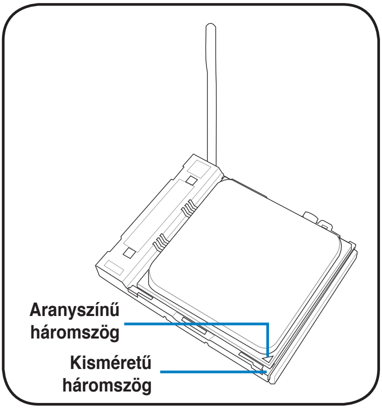
Az AMD AM3+ foglalat az AMD AM3+ és AM3 processzorokkal kompatibilis. Csak bizonyos AM3 alaplap-típusok támogatják az AM3+ processzorok használatát a BIOS frissítésével. Részletekért tekintse meg az ASUS támogatási oldalát.

1. Keresse meg a CPU-foglalatot az alaplapon.
2. Tolja el oldalirányban a kart, hogy oldja a foglalat rögzítését, majd emelje fel, hogy 90º fokos szögben álljon.

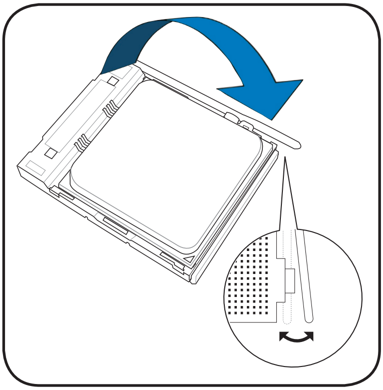
Győződjön meg arról, hogy a foglalat karja 90º fokos szögben áll. Ellenkező esetben a CPU nem fog megfelelően illeszkedni.



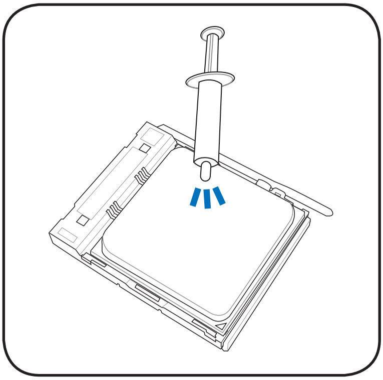
3. Helyezze a CPU-t a foglalatra úgy, hogy az CPU-n lévő aranyszínű háromszög egybeessen a foglalat kis háromszöggel jelölt sarkával.
4. Óvatosan helyezze a CPU-t a foglalatba, amíg a helyére nem illeszkedik.



5. Ha a CPU megfelelően a helyére illeszkedik, hajtsa le a kart a CPU rögzítéséhez. A kar a foglalat oldalán lévő fül mögé pattan rögzített helyzetbe.



6. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog meggyőződve arról, hogy egységes és vékony rétegben vitte fel.



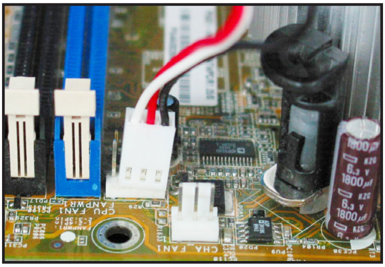
Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Ilyen esetben hagyja ki ezt a lépést.

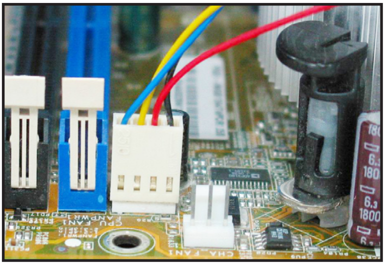
A hőközvetítő paszta mérgező és nem ehető. NE egye meg. Ha a szemébe kerül vagy a bőrével érintkezik, azonnal mossa le és forduljon szakorvoshoz.

1.2 A hűtőborda és ventilátor felszerelése

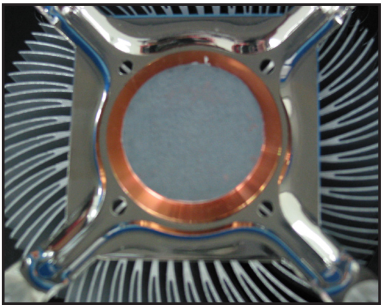
A CPU-hűtőborda és ventilátor felszerelése:

1. Az Intel® vagy az AND által tanúsított hűtőborda-ventilátor szerelvényt válasszon az alaplapnak megfelelően. Három- (bal oldal) és négy érintkezős (jobb oldal) ventilátor-csatlakozók találhatók az alaplapon. Kizárólag a négy érintkezős CPU-ventilátorok támogatják az ASUS Q-Fan technológiát.



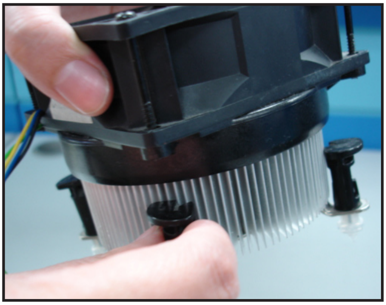


Intel® által hitelesített hűtőborda esetén:



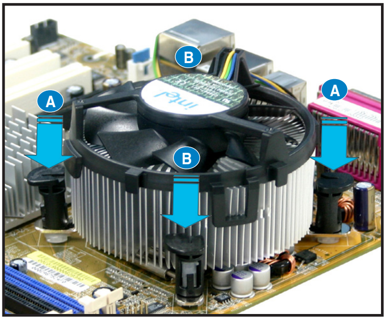
2. Egyes hűtőbordákra esetleg már korábban felvitték a hőközvetítő anyagot. Amennyiben így van, ne kaparja le, de a védőfóliát csak közvetlenül a felszerelés előtt távolítsa el. Amennyiben nem, a hűtőborda felszerelése előtt vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog. Győződjön meg arról, hogy egyenletes, vékony rétegben vitte fel.

A paszta elszennyeződésének megakadályozása érdekében, NE közvetlenül az ujjával vigye fel a pasztát.

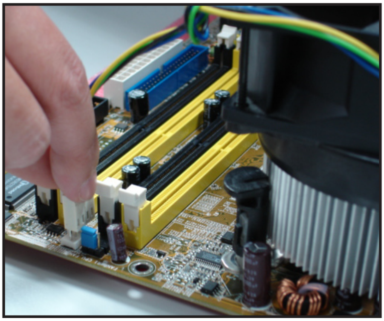


3. Állítsa a rögzítőket úgy, hogy a felül lévő rovátka vékonyabb vége kifelé nézzen

4. Egyszerre két rögzítőt nyomjon le átlós irányban, hogy a hűtőborda-ventilátor szerelvényt az alaplaphoz rögzítse.



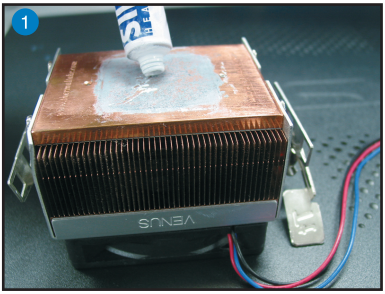
5. Csatlakoztassa a CPU-ventilátor tápkábelét az alaplap megfelelő csatlakozójához.

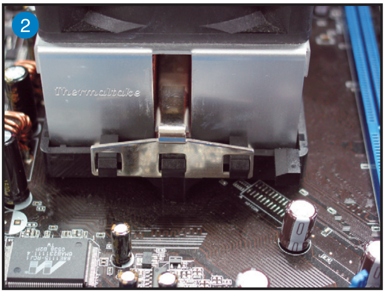


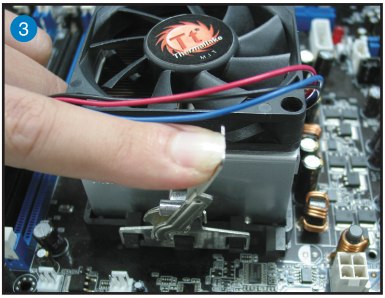
NE felejtse el a CPU-ventilátor tápkábelét az alaplaphoz csatlakoztatni! Hardver-ellenőrzési hiba fordulhat elő, ha nem csatlakoztatja ezt a csatlakozót, és javasoljuk, hogy körkörösen szimmetrikus hűtőbordát használjon a maximális hőleadó felület alkalmazása érdekében.

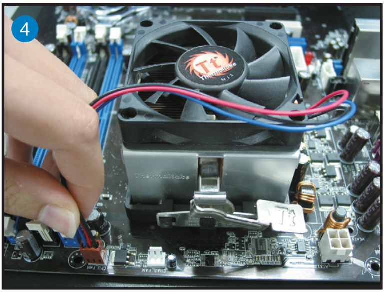
AMD által hitelesített hűtőborda esetén:

AMD által hitelesített hűtőborda beszeléséhez kövesse az alábbi utasításokat.







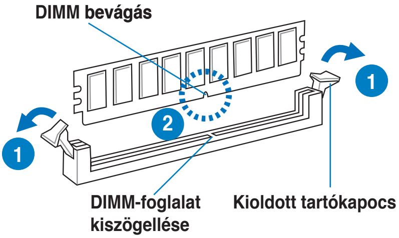


1.3 DIMM beszerelése

Ne felejtse el kihúzni a hálózati tápkábelt DIMM modulok, valamint egyéb alkatrészek be-, illetve kiszerelése előtt. Ennek figyelmen kívül hagyása az alaplap és/vagy az alkatrészek súlyos megrongálódásához vezethet.

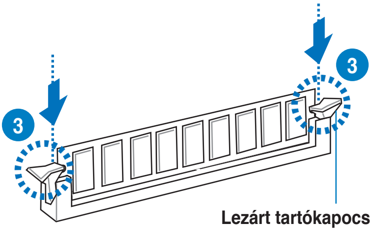
DIMM beszerelése dupla rögzítős DIMM foglalatba

1. Oldja a DIMM-foglalat rögzítését a kapcsok kifelé nyomásával.
2. Illessze a DIMM-modult a foglalatba úgy, hogy a DIMM-modulon lévő bevágás egy vonalba essen a DIMM-foglalat kiszögellésével.



A DIMM rovátkát tartalmaz, amely csak egy irányban teszi lehetővé a beszerelését. NE erőltesse a DIMM-modult, ha rossz irányba néz, miközben a helyére illeszti, mert megsérülhet a DIMM-modul!

3. A DIMM-modult a két végénél tartsa, majd nyomja a DIMM-modult függőlegesen a helyére. Nyomja határozottan a DIMM-modult a foglalatba, amíg a tartókapcsok a helyükre nem pattannak, a DIMM-modul nem nyomható tovább és a DIMM megfelelően illeszkedik.

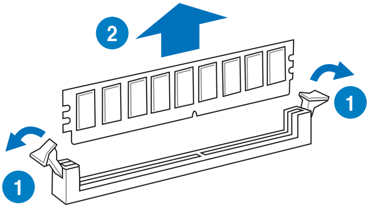


A DIMM-modult mindig FÜGGŐLEGESEN illessze a foglalatba, nehogy megsérüljön a DIMM-modulon lévő bevágás.

- Kettő vagy több DIMM telepítését illetően tekintse meg az alaplap csomagjához mellékelt felhasználói útmutatót.
- A memóriamodulok hivatalos forgalmazóinak listáját illetően olvassa el a felhasználói útmutatót.

DIMM kiszerelése dupla rögzítős DIMM-foglalatból

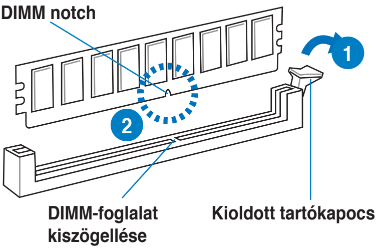
1. Egyszerre nyomja kifelé a rögzítő kapcsokat a DIMM kioldásához.
2. Húzza ki a DIMM-modult a foglalatból.



A DIMM-modult könnyedén támassza az ujjával, amikor a kapcsokat lenyomja. A DIMM megsérülhet, ha a túlzott nyomás hatására kiugrik.

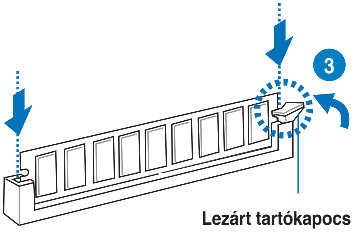
DIMM beszerelése szimpla rögzítős DIMM foglalatba

1. Oldja a DIMM-foglalat rögzítését a kapcsok kifelé nyomásával.
2. Illessze a DIMM-modult a foglalatba úgy, hogy a DIMM-modulon lévő bevágás egy vonalba essen a DIMM-foglalat kiszögellésével.



A DIMM rovátkát tartalmaz, amely csak egy irányban teszi lehetővé a beszerelését. NE erőltesse a DIMM-modult, ha rossz irányba néz, miközben a helyére illeszti, mert megsérülhet a DIMM-modul!

3. A DIMM-modult a két végénél tartsa, majd nyomja a DIMM-modult függőlegesen a helyére. Nyomja határozottan a DIMM-modult a foglalatba, amíg a tartókapcsok a helyükre nem pattannak, a DIMM-modul nem nyomható tovább és a DIMM megfelelően illeszkedik.

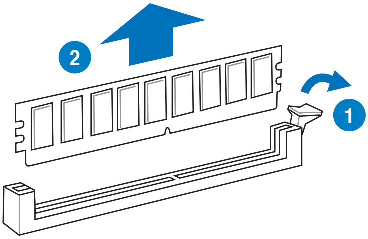


A DIMM-modult mindig FÜGGŐLEGESEN illessze a foglalatba, nehogy megsérüljön a DIMM-modulon lévő bevágás.

- Kettő vagy több DIMM telepítését illetően tekintse meg az alaplap csomagjához mellékelt felhasználói útmutatót.
- A memóriamodulok hivatalos forgalmazóinak listáját illetően olvassa el a felhasználói útmutatót.

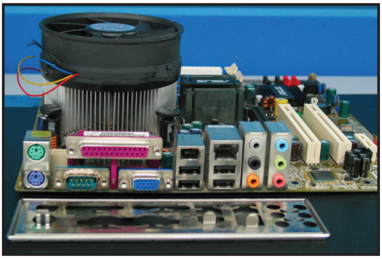
DIMM kiszerelése szimpla rögzítős DIMM-foglalatból

1. Nyomja kifelé a rögzítő kapcsot a DIMM kioldásához.
2. Húzza ki a DIMM-modult a foglalatból.



A DIMM-modult könnyedén támassza az ujjával, amikor a kapcsokat lenyomja. A DIMM megsérülhet, ha a túlzott nyomás hatására kiugrik.

1.4 Az alaplap beszerelése

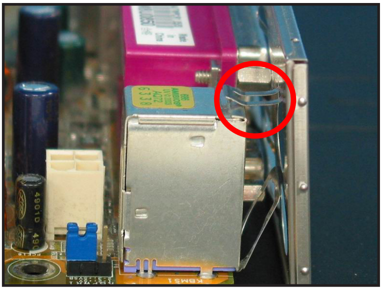


1. Az I/O portok alaplaponként eltérők lehetnek. Kizárólag az alaplaphoz mellékelt hátsó I/O-lemezt használja.

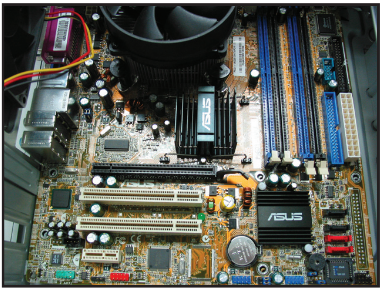
Egyes éles szélek és hegyes csúcsok fizikai sérülést okozhatnak. Tanácsoljuk, hogy vágás és szúrás álló kesztyűt viseljen az alaplap és az I/O lemez beszerelésekor.

2. Csavarja be a távtartókat a fémlemez csavarlyukaiba.

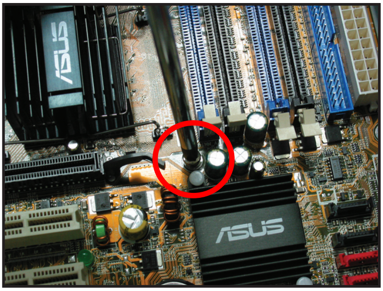
3. Az I/O port fedőlemez szélein kialakított rugók megsérthetik az I/O portokat. Óvatosan szerelje fel az I/O port fedőlemezt.



4. Az alaplap I/O oldalát a készülékház hátulja felé állítsa, és helyezze az alaplapot a házba.



5. Illessze be, és lazán húzza meg a csavarokat átlósan haladva. Az összes csavar behelyezése után a húzza meg őket az ujjával.



- Eltávolíthatja a bővítőhelyek fém védőlemezeit a ház hátulján, mielőtt beszereli az alaplapot. Egyes háztípusoknál előfordulhat, hogy az alaplap beszerelése után nehéz eltávolítani az összes bővítőhely fém védőlemezét.
- NE húzza túl a csavarokat. Ezzel tönkreteheti az alaplapot.

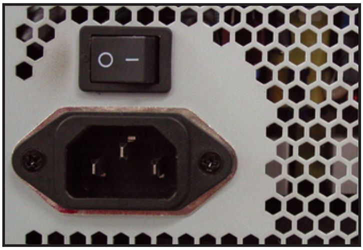
1.5 Tápegység beszerelése

Kétféle típusú tápegység kapható a kereskedelemben. Az egyik aktív tápfeszültség beállítással (PFC), míg a másik passzív PFC-vel rendelkezik.

1. Válassza ki a tápegységet.

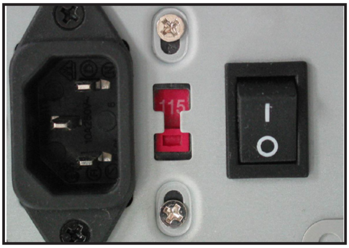
Tápegység passzív PFC-vel:

A passzív PFC esetében a felhasználó saját maga állítja be kézzel a bemeneti feszültséget.

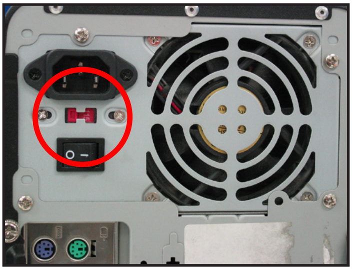


Tápegység aktív PFC-vel:

Az aktív PFC automatikusan kiválasztja a megfelelő bemeneti feszültséget.



2. Amennyiben passzív PFC-vel rendelkező tápegységet használ, a területen használt áramforrásnak megfelelően állítsa be a hálózati tápegységet.



A tápegység megfelelő áramforrásra állításának elmulasztása a rendszer súlyos károsodásához vezethet.

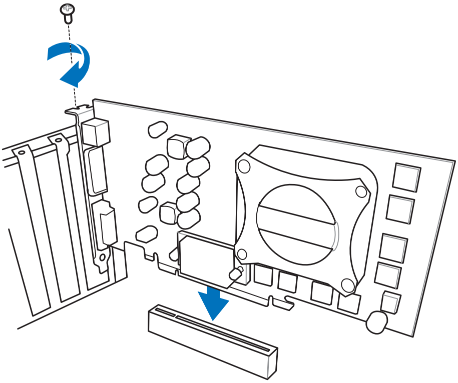
Kizárólag biztonsági jóváhagyással rendelkező tápegységet használjon. A nem stabil tápegységek használata esetén megsérülhet az alaplapja és a számítógép. egyéb részegységei. Az alaplappal használható tápegységeket illetően olvassa el felhasználói kézikönyvet.

1.6 Bővítőkártya beszerelése

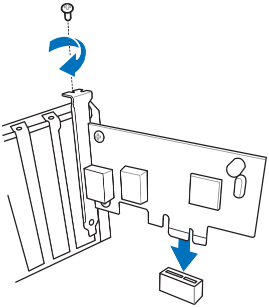
Bővítőkártya beszerelése:

1. Távolítsa el ahhoz a foglalathoz tartozó fém fedőlemezt, amelyet bővítőkártya beszereléséhez használni kíván.
2. Szerelje be a bővítőkártyát, és győződjön meg arról, hogy a kártya megfelelően illeszkedik a foglalatba.
3. Rögzítse a kártyát a nyílásba egy csavarral.
4. További bővítőkártyák telepítéséhez ismételje meg az előző lépéseket.

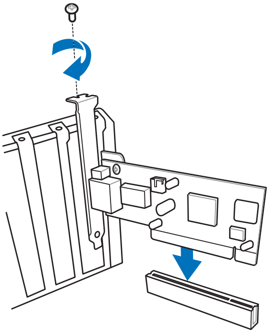
PCIE x16 kártya



PCIE x1 kártya



PCI kártya

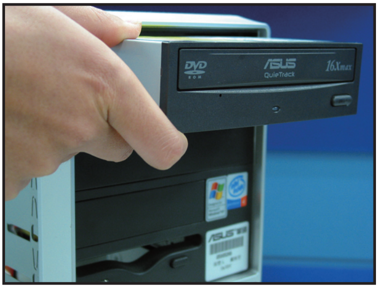


- A kártya konfigurációjának részleteit illetően tekintse meg a kártya dokumentációját, illetve az alaplap felhasználói útmutatóját, ha jumpereket is be kell állítania a bővítőkártya telepítését követően.
- Tekintse meg az alaplap felhasználói útmutatóját a bővítőkártya jelkábelének csatlakoztatását illetően.

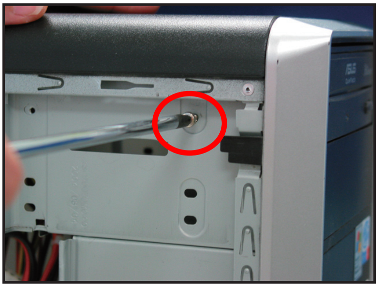
1.7 Lemezmeghajtók beszerelése

1.7.1 PATA optikai meghajtó

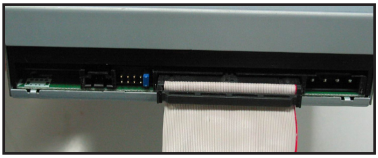
1. Távolítsa el a meghajtó-bővítőhely fedelét, és csúsztassa be az optikai meghajtót a bővítőhelyre.



2. Hozza egy vonalba a csavarlyukakat, és rögzítse csavarokkal a lemezmeghajtót.

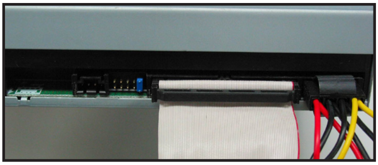


3. Állítsa be az IDE kábel csatlakozójának irányát, és csatlakoztassa az optikai meghajtóhoz. Az IDE kábelen lévő vörös csík az 1-es érintkezőhöz vezessen, és illeszkednie kell az optikai meghajtó 1-es érintkezőjét jelző kiemelkedéshez.

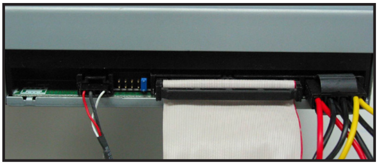


Az IDE kábelek csak egyféleképpen csatlakoztathatók. Soha ne erőltesse az IDE kábelt a csatlakozóaljzatába.

4. Csatlakoztassa a 4-érintkezős tápkábelt az optikai meghajtóhoz.



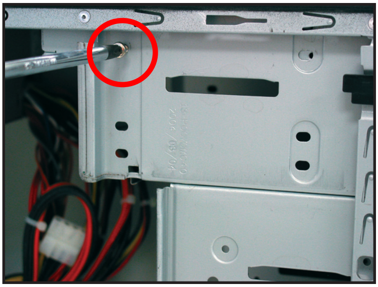
5. Csatlakoztassa az audiokábelt az optikai meghajtó megfelelő csatlakozójához.



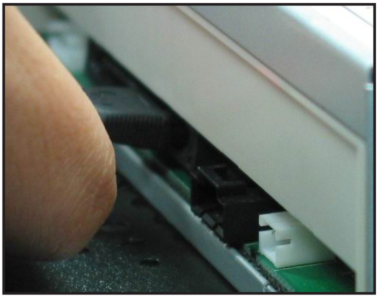
1.7.2 SATA optikai meghajtó

1. Távolítsa el meghajtó-bővítőhely fedelét, és csúsztassa be az optikai meghajtót a bővítőhelyre.

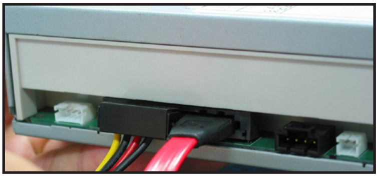
2. Hozza egy vonalba a csavarlyukakat, és rögzítse csavarokkal a lemezmeghajtót.



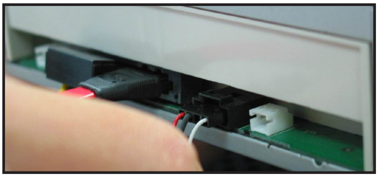
3. Állítsa be a SATA kábel csatlakozójának irányát, és csatlakoztassa az optikai meghajtóhoz. A SATA kábelek csak egyféleképpen csatlakoztathatók. Soha ne erőltesse a SATA kábelt a csatlakozóaljzatába.



4. Csatlakoztassa a SATA tápkábelt az optikai meghajtóhoz.

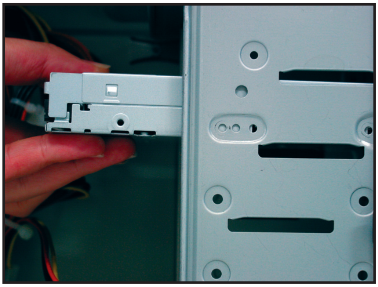


5. Csatlakoztassa az audiokábelt az optikai meghajtó megfelelő csatlakozójához.

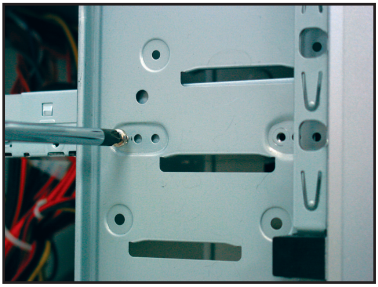


1.7.3 Hajlékonylemez-meghajtó

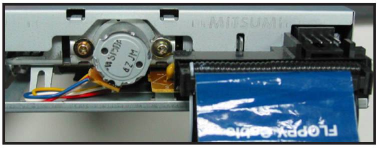
1. Távolítsa el a meghajtó-bővítőhely fedelét, és helyezze a hajlékonylemez-meghajtót a bővítőhelyre.



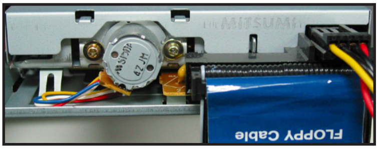
2. Hozza egy vonalba a csavarlyukakat, és rögzítse csavarokkal a lemezmeghajtót.



3. Állítsa be a hajlékonylemez-meghajtó interfészkábel csatlakozójának irányát, és csatlakoztassa a hajlékonylemez-meghajtóhoz. A kábelen lévő vörös csík az 1-es érintkezőhöz vezessen, és illeszkednie kell a hajlékonylemez-meghajtó 1-es érintkezőjéhez.

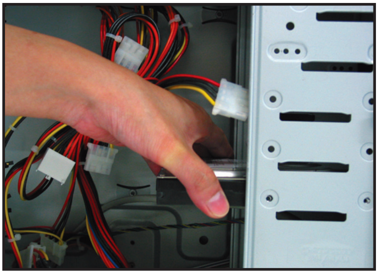


4. Csatlakoztassa a hajlékonylemez-meghajtó tápkábelt a hajlékonylemez-meghajtó hátulján lévő csatlakozóhoz.

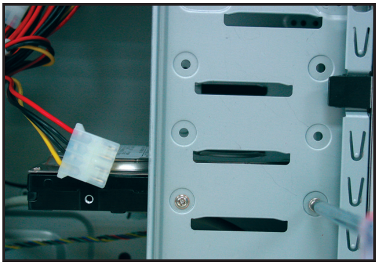


1.7.4 PATA merevlemez-meghajtó

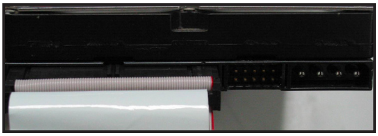
1. Helyezze a PATA merevlemez-meghajtót a meghajtó-bővítőhelybe.



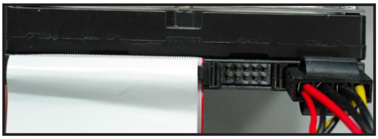
2. Hozza egy vonalba a csavarlyukakat, és rögzítse csavarokkal a lemezmeghajtót.



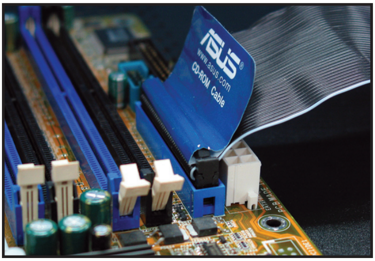
3. Állítsa be a merevlemez-meghajtó jelkábelének irányát, és csatlakoztassa a merevlemez-meghajtóhoz. A kábel vörös csíkja az 1-es érintkezőt jelzi. Illessze a kábelcsatlakozót az aljzatba, ügyelve a bevágás által jelzett irányra, és ne erőltesse a csatlakozót az aljzatba.



4. Csatlakoztassa a 4 érintkezős tápkábelt a merevlemez-meghajtó hátulján lévő tápcsatlakozóhoz.

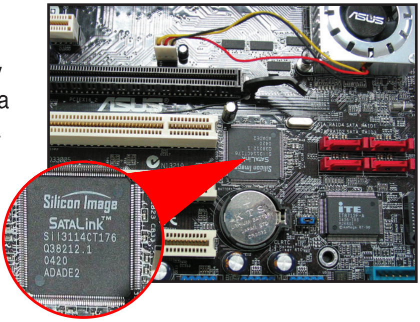


5. Csatlakoztassa a jelkábel másik végét az alaplap megfelelő csatlakozójához.



Megjegyzések PATA merevlemez-meghajtó beszereléséhez

- Ha az Ön operációs rendszerét olyan merevlemez-meghajtóra telepítették, amelyet RAID vagy egyéb vezérlő vezérel, először a vezérlő illesztőprogramját kell a merevlemezre telepítenie.



- A kábelcsatlakozó színkódolt. A kék színű a gazdagéphez csatlakozik, míg a fekete/szürke az elsődleges/ másodlagos lemezmeghajtóhoz.

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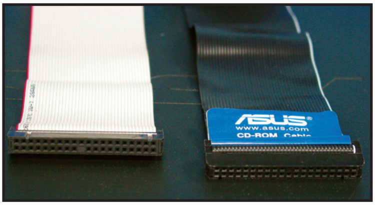
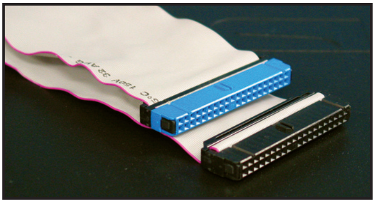
FLOPPY Cable
www.asus.com
CD-ROM Cable

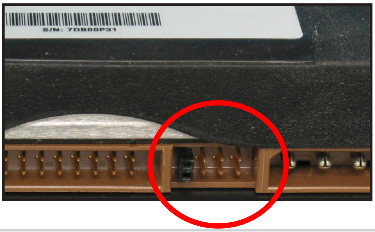
- Kétféle kábel használható ATA IDE lemezegységekhez: az újabb 80 vezetékes (jobbra), és a régebbi 40 vezetékes (balra) kábel. ATA66/100/133 lemezmeghajtók esetében kizárólag a 80 vezetékes kábel kínál nagyobb teljestményt. A 40 vezetékes kábeleket általában optikai meghajtókkal használják.



- A kábelcsatlakozó színkódolt. A kék színű a gazdagéphez csatlakozik, míg a fekete/szürke az elsődleges/ másodlagos lemezmeghajtóhoz.

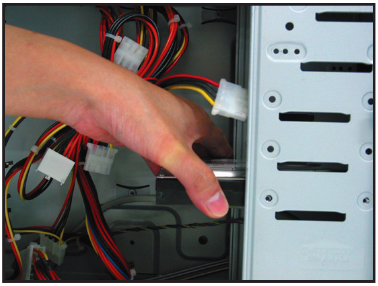


- Amennyiben két IDE eszközt csatlakoztat az IDE kábelhez, a jumpereket eltérő állásba kell állítani: az egyiket „MASTER”, a másikat pedig „SLAVE” állásra. Ha 80 vezetékes kábelt használ, a „cable select” funkciót is használhatja.

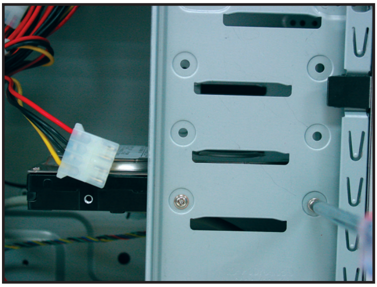


1.7.5. SATA merevlemez-meghajtó

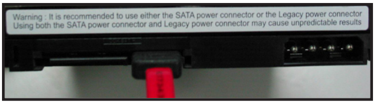
1. Helyezze a SATA merevlemez-meghajtót a meghajtó-bővítőhelybe.



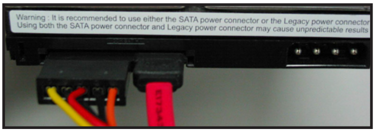
2. Hozza egy vonalba a csavarlyukakat, és rögzítse csavarokkal a lemezmeghajtót.



3. Állítsa be a SATA merevlemez-meghajtó jelkábelének irányát, és csatlakoztassa a merevlemez-meghajtóhoz. A kábel csak egy irányban illeszkedik megfelelően a foglalatba.

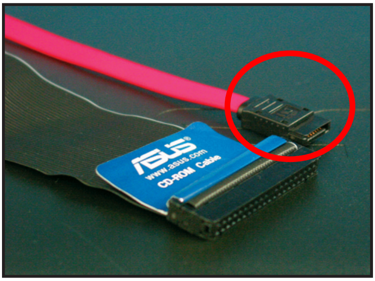

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Csatlakoztassa a SATA merevlemez-meghajtó tápkábelt a merevlemez-meghajtó hátulján lévő csatlakozóhoz.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Megjegyzések SATA merevlemez-meghajtó beszereléséhez

- A Soros ATA (SATA) csatoló nagyobb adatátviteli sebességet és nagyobb feszültség-tűréshatárt kínál. A SATA kábel keskeny kialakítása pedig kábelvezetési problémákat old meg, és jobb légáramlást tesz lehetővé a készülékházban.


ASUS
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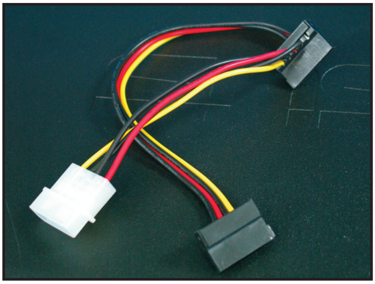
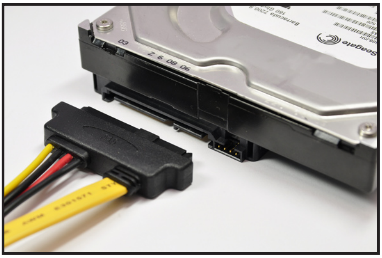
- A SATA tápkábel csatlakozó eltér a hagyományos 4 érintkezős tápcsatlakozótól. Az ASUS alaplaphoz tápcsatlakozó adapterkábelt is mellékelünk arra az esetre, ha az Ön tápegysége nem tartalmazza az újabb csatlakozót.

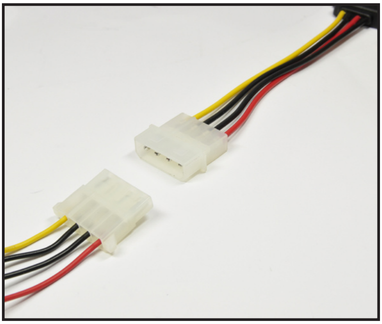


1.7.6 SAS merevlemez-meghajtó

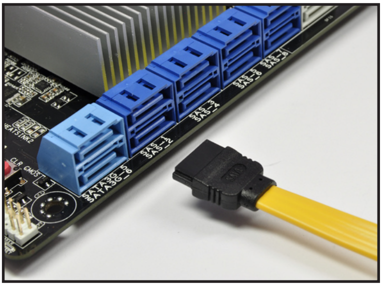
1. Csatlakoztassa a SAS jel/hálózati kombinált kábelt a merevlemez-meghajtóhoz. A kábel csak egy irányban illeszkedik megfelelően a foglalatba..



2. Csatlakoztassa a SAS hálózati kábelt a tápegységen lévő hálózati csatlakozóhoz.



3. Csatlakoztassa a SAS jelkábelt az alaplapon lévő SAS csatlakozóhoz.

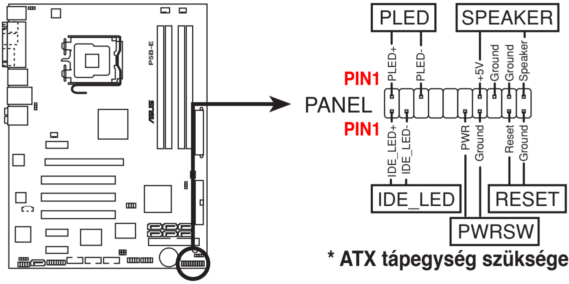


1.8 Az előlap kábelei

Az előlap kábeleinek csatlakoztatása:

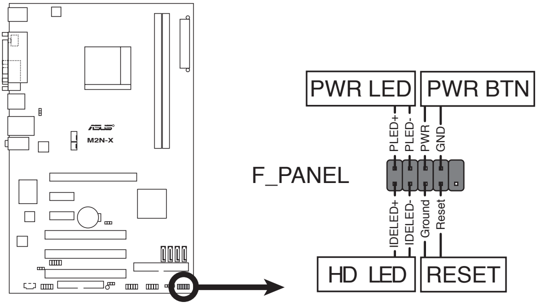
- RESET (alaphelyzet kapcsoló)
- PLED (Bekapcsolt állapotot jelző LED)
- PWRSW (Üzemkapcsoló)
- IDE_LED (Merevlemez tevékenységet jelző LED)
- SPEAKER (Hangszóró-csatlakozó)

20-8 pin front panel connector


P5B-E
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* **ATX tápegység szükséges hozzá.**

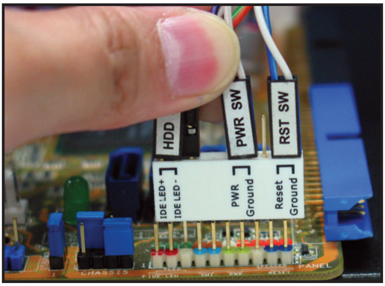
10-1 pin front panel connector


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Az Ön számítógépházának előlapkábelei típusonként vagy kialakításként eltérhetnek. Csatlakoztassa e csatlakozókat az alaplaphoz a címkék szerint.
- HA a LED kijelzők annak ellenére nem világítanak, hogy a megfelelő helyre csatlakoztatta őket, elképzelhető, hogy felcserélte a földérintkezőt a jelérintkezővel. Általában a fehér színű vezeték a föld-, a színkódolt pedig a jelcsatlakozóhoz vezet.
- A SPEAKER, RESET és PWRSW előlapi kábelek iránya nincs meghatározva, míg az IDE_LED és PLED kábelek irányára ügyelni kell. Csatlakoztassa a PIN1 jelzésű kábelt az alaplap PIN1 jelzésű csatlakozójához.
- Az előlapi csatlakozó az alaplap típusától függően eltérő lehet. További tájékoztatásért tekintse meg a felhasználói útmutatót.

ASUS Q-Connector

Az ASUS Q-Connector egy lépésben történő csatlakoztatásával időt takarít meg, mert nem kell vesződnie az előlapi kábelrengeteggel. A részletekről a felhasználói útmutatóban olvashat.

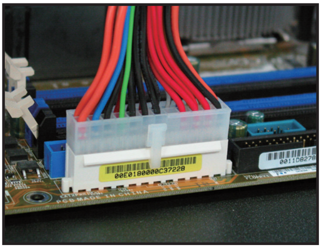


A Q-connector csak bizonyos modelleken áll rendelkezésre. A részletekről a felhasználói útmutatóban olvashat.

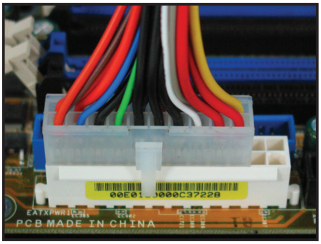
1.9 ATX tápegység csatlakoztatása

Az ATX tápcsatlakozók csak egy irányban illeszkedik a foglalatba. Használja az oldalán lévő kapcsot a csatlakozók alaplaphoz történő rögzítéséhez. NE erőltesse a dugókat az alaplapon lévő hüvelyekbe. Általában kétféle tápcsatlakozó van az alaplapon: 24 érintkezős és 4 érintkezős tápcsatlakozó. Egyes régebbi tápegységek esetében előfordulhat, hogy 20 érintkezős tápcsatlakozó van, ami illeszkedik az alaplap 24 érintkezős tápcsatlakozó aljzatába.

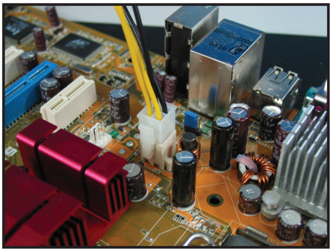
24 érintkezős tápcsatlakozó



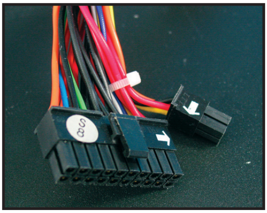
20 érintkezős tápcsatlakozó (a 24 érintkezős hüvelyen)

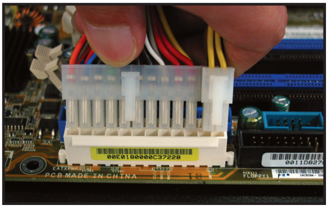


4 érintkezős tápcsatlakozó



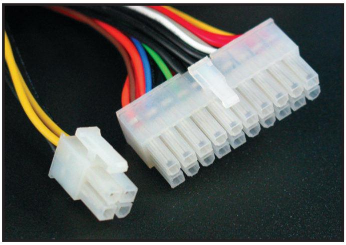
- NE csatlakoztassa a hálózati áramforrást, amikor a tápcsatlakozó dugókat az alaplaphoz csatlakoztatja.
- Győződjön meg arról, hogy a tápcsatlakozók szorosan illeszkednek az alaplapon lévő aljzatba.
- Amennyiben az Ön tápegysége 20+4 érintkezős, a két csatlakozót egyszerre csatlakoztathatja az alaplap 24 érintkezős tápcsatlakozó aljzatába.



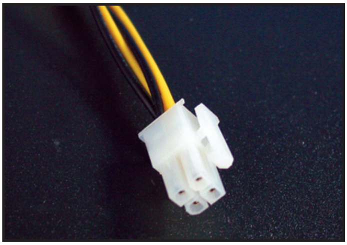


Tápcsatlakozók

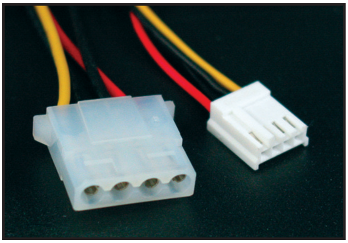
20+4 (24) érintkezős ATX tápcsatlakozó



4 érintkezős ATX csatlakozó

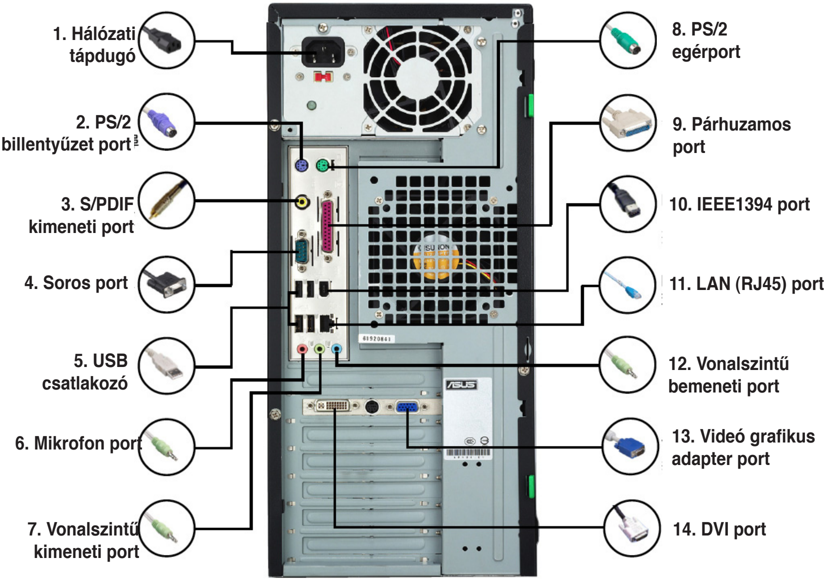


Periféria-tápcsatlakozó (balra)
Hajlékonylemez-meghajtó tápcsatlakozója (jobbra)



1.10 Perifériák és kiegészítők

Tekintse meg az alábbi ábrát, mielőtt a perifériákat és kiegészítőket csatlakoztatná.


1. Hálózati tápdugó
2. PS/2 billentyűzet port
3. S/PDIF kimeneti port
4. Soros port
5. USB csatlakozó
6. Mikrofon port
7. Vonalszintű kimeneti port
8. PS/2 egérport
9. Párhuzamos port
10. IEEE1394 port
11. LAN (RJ45) port
12. Vonalszintű bemeneti port
13. Videó grafikus adapter port
14. DVI port

1. Hálózati dugó + tápkábel

2. PS/2 billentyűzet port + billentyűzet

3. S/PDIF kimeneti port + Digitális 5.1 csatornás hangszórórendszer

4. Soros port + PDA dokkoló

5. USB-port + USB-eszközök

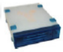
6. Mikrofon port + mikrofon

7. Vonalszintű kimeneti port + hangszóró

8. PS/2 egérport + egér

9. Párhuzamos port + nyomtató

10. IEEE1394 port + külső merevlemez-meghajtó



11. LAN (RJ45) port + modem

12. Vonalszintű bemeneti port + felvevő

13. VGA port + CRT monitor

14. DVI port + LCD monitor

A hátlapon lévő csatlakozók típusonként eltérhetnek. A részletekről a felhasználói útmutatóban olvashat.

1.11 Első üzembe helyezés

A rendszer ezután végrehajtja a bekapcsolási öntesztet, azaz a POST-ot. A tesztek futtatása közben a BIOS hangjelzést adhat (lásd az alábbi táblázatot a BIOS hangjelzéseit illetően).

BIOS hangjelzés	Leírás
Egy folyamatos sípolás, melyet három rövid követ	Nem érzékelhető VGA
Egy folyamatos sípolás, melyet két rövid, majd szünet követ (ismétlődik)	Nem érzékelhető memória
Egy folyamatos sípolás, melyet négy rövid követ	Hardver részegység meghibásodása (AMI BIOS)
Négy rövid sípolás	Hardver részegység meghibásodása (AWARD BIOS)

Hibakeresés és -elhárítás

Hiba	Intézkedés
• Nem lehet bekapcsolni a számítógépet • A bekapcsolt állapotot jelző LED NEM világít • A tápegység ventilátora nem működik.	Győződjön meg arról, hogy a tápkábel megfelelően van csatlakoztatva.
A számítógép be van kapcsolva, de a monitor sötét.	• Győződjön meg arról, hogy a számítógép be van kapcsolva, és a VGA kábel megfelelően csatlakoztik. • Állítsa be a kontraszt és fényerő értékét a monitoron. • Kapcsolja ki a számítógépet, és húzza ki a tápkábelt. Ellenőrizze, hogy szorosan illeszkedik-e a VGA kártya.
Nem érzékelhető memória	• Győződjön meg arról, hogy megfelelő memóriamodult használ • Győződjön meg arról, hogy a DIMM modulok szorosan illeszkednek a DIMM foglalatba. • Győződjön meg arról, hogy a memóriamodul szerepel a hitelesített forgalmazói listán. A hitelesített forgalmazói lista részleteiről a felhasználói útmutatóban olvashat.
Floppy hiba (A kijelző folyamatosan világít, vagy figyelmeztető üzenet jelenik meg a képernyőn.)	• Ellenőrizze a hajlékonylemez-meghajtó konfigurációját a BIOS-ban. • Ellenőrizze, hogy a hajlékonylemez-meghajtó kábelei megfelelően csatlakoznak-e.
Merevlemez/optikai meghajtó hiba (nem lehet felismerni vagy érzékelni)	• Győződjön meg arról, hogy a jumper-beállítás megfelelő. (Master/Slave) • Ellenőrizze a merevlemez/optikai meghajtó konfigurációját a BIOS-ban. • Győződjön meg arról, hogy az eszköz(ök) kábelei megfelelően csatlakoznak. • Győződjön meg arról, hogy telepítették az illesztőprogramokat.

2. fejezet: BIOS kezelése/frissítése

2.1 AFUDOS segédprogram

Az AFUDOS segédprogram lehetővé teszi a BIOS-fájl frissítését DOS környezetben egy, a BIOS-fájlt tartalmazó rendszerindító hajlékonylemez segítségével. A segédprogram lehetővé teszi az aktuális BIOS-fájl másolását is, melyet tartalékként használhat, ha BIOS meghibásodna vagy adatai megsérülnének a frissítés során.

Az aktuális BIOS másolása

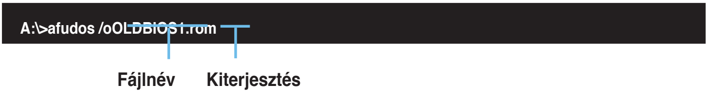
Az aktuális BIOS-fájl másolása az AFUDOS segédprogram segítségével:

- Ellenőrizze, hogy a hajlékonylemez, ahova másolni kívánja a fájlt nem írásvédett-e, és legalább 1024 KB szabad helyet tartalmaz.
- A soron következő BIOS-képernyők csupán tájékoztató jellegűek. A tényleges BIOS-képernyők eltérhetnek az ábrázoltaktól.

1. Másolja az AFUDOS segédprogramot (afudos.exe) az alaplap támogató DVD-lemezéről a korábban létrehozott rendszerindító hajlékonylemezre.
2. Indítsa el a rendszert DOS-üzemmódban, majd parancssoron gépelje be a következőt:

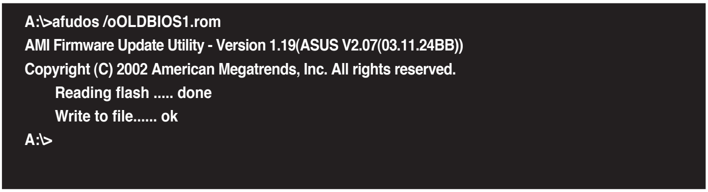
   afudos /o[fájlnév]

   ahol a [fájlnév] bármilyen, a felhasználó által megadott, legfeljebb nyolc alfanumerikus karakterből álló fájlnév és három alfanumerikus karakterből álló kiterjesztés.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Nyomja meg az <Enter> gombot. A segédprogram az aktuális BIOS-fájlt a hajlékonylemezre másolja.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

A segédprogram az aktuális BIOS-fájl másolása után visszatér a DOS parancssorra.

A BIOS-fájl frissítése

A BIOS-fájl frissítése az AFUDOS segédprogram segítségével:

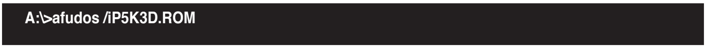
1. Látogassa meg az ASUS weboldalát (www.asus.com), ahonnan letöltheti a legfrissebb BIOS-fájlt az alaplaphoz. Mentse a BIOS-fájlt egy rendszerindító hajlékonylemezre.

Írja le a BIOS fájlnevet egy papírlapra. A parancssoron pontosan kell begépelnie a BIOS-fájlnevet.

2. Másolja az AFUDOS segédprogramot (afudos.exe) az alaplap támogató DVD-lemezéről a korábban létrehozott rendszerindító hajlékonylemezre.
3. Indítsa el a rendszert DOS-üzemmódban, majd parancssoron gépelje be a következőt:

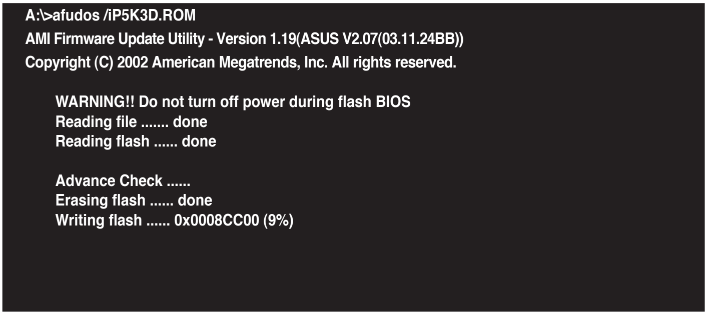
   afudos /i[fájlnév]

   ahol a [fájlnév] a legfrissebb, vagy az eredeti BIOS-fájl neve a rendszerindító hajlékonylemezen.



```
A:\>afudos /iP5K3D.ROM
```

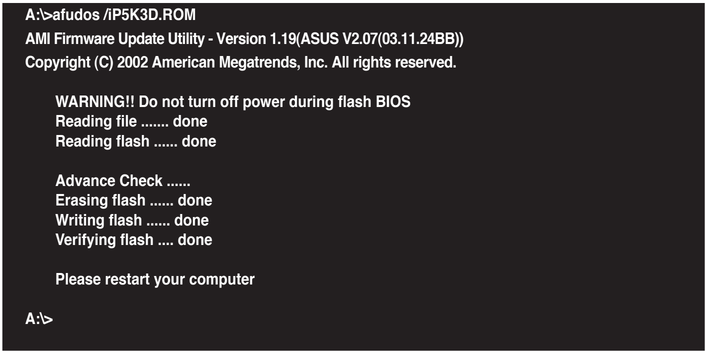
4. A segédprogram ellenőrzi a fájlt, és megkezdi frissíteni a BIOS-t.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

NE kapcsolja ki vagy indítsa újra a rendszert a BIOS frissítése közben, mert ellenkező esetben nem fog indulni a számítógépe!

5. A segédprogram az aktuális BIOS frissítése után visszatér a DOS parancssorra. Indítsa újra a rendszert a merevlemez-meghajtóról.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 AWARD BIOS Flash segédprogram

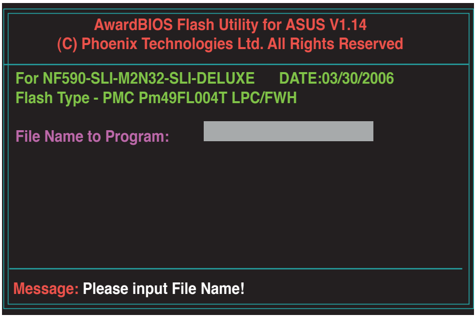
A BIOS frissítése

A Basic Input/Output (BIOS) rendszert az AwardBIOS Flash segédprogram segítségével lehet frissíteni. Kövesse az alábbi utasításokat, a BIOS-t e segédprogram használatával kívánja frissíteni.

1. Töltse le a legfrissebb BIOS-fájlt az ASUS weblapjáról: Nevezze át a fájlt M2N32SLI.BIN névre, és mentse egy hajlékonylemezre, CD ROM-ra vagy USB flash lemezre **FAT 16/12 formátumban**.

Csak a módosított BIOS-fájlt mentse a lemezre, nehogy a nem megfelelő BIOS-fájlt töltse be.

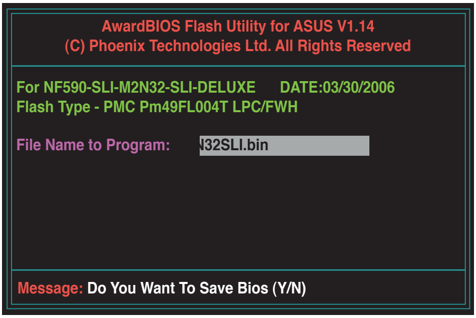
2. Másolja az AwardBIOS Flash segédprogramot (awdflash.exe) a támogató CD Software mappájából arra a hajlékonylemezre, CD-ROM-ra vagy USB flash lemezre, amely a legfrissebb BIOS-fájlt tartalmazza.
3. Indítsa el a rendszert DOS-üzemmódban a korábban létrehozott rendszerindító hajlékonylemez, CD-ROM vagy USB flash lemez segítségével.
4. DOS-üzemmódban használja az <X:> konvenciót (az X a lemezmeghajtó betűjelét jelöli), hogy arra a hajlékonylemezre, CD-ROM-ra vagy USB flash lemezre váltson, amely a legfrissebb BIOS-fájlt és AwardBIOS Flash segédprogramot tartalmazza.



```
            AwardBIOS Flash Utility for ASUS V1.14
       (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

5. A DOS parancssoron gépelje be a következőt: awdflash, majd nyomja meg az <Enter> billentyűt. Megjelenik az Award BIOS Flash Utility képernyője.

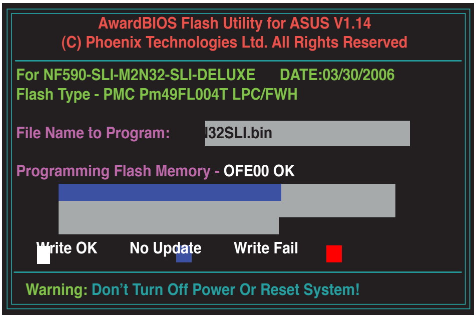
6. Gépelje be a BIOS fájlnevet a „File Name to Program” (program fájlnév) mezőbe, majd nyomja meg az <Enter> gombot.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:      N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Nyomja meg az <N> billentyűt, amikor a segédprogram rákérdez az aktuális BIOS-fájl mentésére. Megjelenik a következő képernyő:

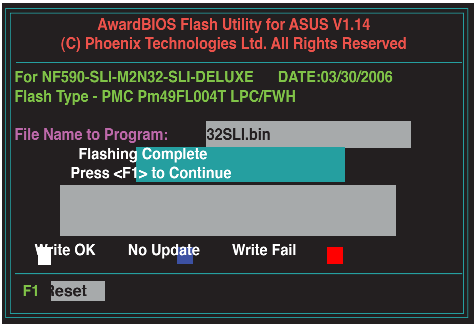
8. A segédprogram ellenőrzi a hajlékonylemezen, CD-ROM-on vagy USB flash lemezen lévő BIOS-fájlt, majd elkezdi beégetni a BIOS-fájt.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:      32SLI.bin

Programming Flash Memory - OFE00 OK

Write OK      No Update      Write Fail

Warning: Don’t Turn Off Power Or Reset System!
```

NE kapcsolja ki vagy indítsa újra az eszközt a flash-művelet közben!

9. A segédprogram megjeleníti a „Flashing Complete” (Beégetés kész) üzenetet a BIOS-fájl sikeres beégetésről. Távolítsa el a lemezt, majd nyomja meg az <F1> gombot a rendszer újraindításához.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:      32SLI.bin
          Flashing Complete
         Press <F1> to Continue

Write OK      No Update      Write Fail

F1  Reset
```

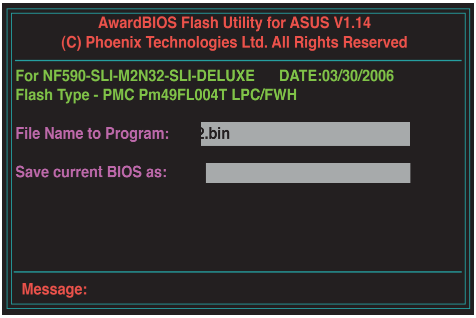
Az aktuális BIOS-fájl mentése

Az AwardBIOS Flash segédprogramot az aktuális BIOS-fájl mentéséhez használhatja. Az aktuális BIOS-fájlt visszatöltheti, ha a BIOS-fájl megsérülne a beégetés során.

Ellenőrizze, hogy a hajlékonylemez, CD-ROM vagy USB flash lemez, ahova másolni kívánja a fájlt elegendő szabad helyet tartalmaz a mentéséhez.

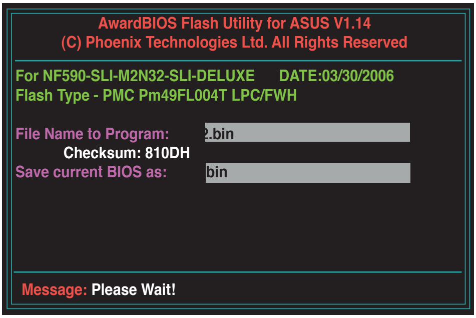
Az aktuális BIOS-fájl mentése az AwardBIOS Flash segédprogram segítségével:

1. Kövesse az előző rész 1-6. lépését.
2. Nyomja meg az <Y> billentyűt, amikor a segédprogram rákérdez az aktuális BIOS-fájl mentésére. Megjelenik a következő képernyő:



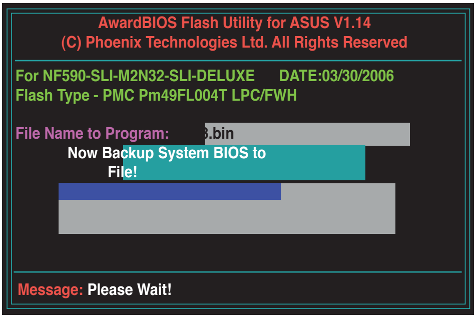
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:     .bin

Save current BIOS as:

Message:
```

3. Gépelje be az aktuális BIOS fájlnevét a „Save current BIOS as” (Aktuális BIOS mentése más néven) mezőbe, majd nyomja meg az <Enter> gombot.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:     .bin
      Checksum: 810DH
Save current BIOS as:     bin

Message: Please Wait!
```

4. A segédprogram menti az aktuális BIOS-fájlt a lemezre, majd visszatér a BIOS-beégetés folyamatához.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:     .bin
      Now Backup System BIOS to
           File!

Message: Please Wait!
```

2.3 ASUS Update segédprogram

Az ASUS Update segédprogram lehetővé teszi az alaplap BIOS-fájljának kezelését, mentését és frissítését Windows® környezetben. Az ASUS Update segédprogram a következőket teszi lehetővé:

- Az aktuális BIOS-fájl mentése
- A legfrissebb BIOS-fájl letöltése az internetről
- A BIOS frissítése a legújabb BIOS-fájl segítségével
- A BIOS frissítése közvetlenül az internetről, és
- A BIOS verziószám megjelenítése.

A segédprogram megtalálható az alaplaphoz mellékelt támogató DVD-lemezen.

Az ASUS Update internet-kapcsolatot igényel hálózaton vagy internet-szolgáltatón (ISP) keresztül.

Az ASUS Update telepítése

Az ASUS Update telepítése:

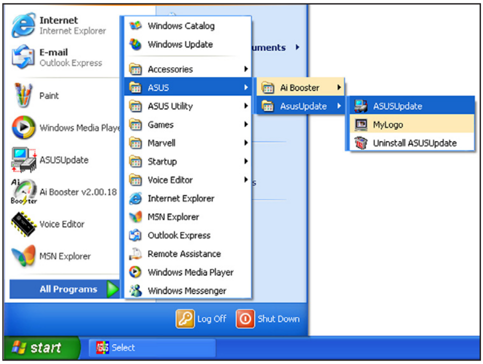
1. Helyezze be a támogató DVD-lemezt az optikai meghajtóba. Megjelenik a „Drivers” (Illesztőprogramok) menü.
2. A Main (Főmenü) elemből, kattintson a „Utilities” (Segédprogramok) fülra, majd az Install ASUS Update VX.XX.XX (VX.XX.XX sz. ASUS frissítés telepítése) tételre.
3. Az ASUS Update segédprogram felkerül a rendszerre.

A BIOS frissítése az internetről

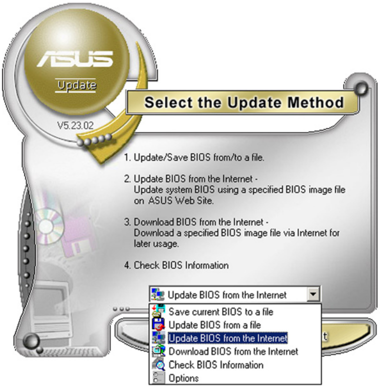
Lépjen ki mindegyik Windows® alkalmazásból, mielőtt a BIOS-t e segédprogram használatával frissítené.

A BIOS frissítése az internetről:

1. Indítsa el az ASUS Update segédprogramot a Windows® asztalról a **Start > Programs (Programok) > ASUS > ASUSUpdate > ASUSUpdate** elemre kattintással. Megjelenik az ASUS Update főablaka.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

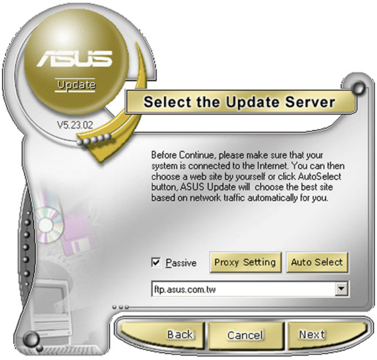
2. Jelölje ki az Update BIOS from the Internet (BIOS frissítése az internetről) elemet a legördülő menüben, majd kattintson a Next (Tovább) gombra.


ASUS
Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Válassza ki az Önhöz legközelebb lévő ASUS FTP oldalt, a fölösleges forgalom elkerülése érdekében, vagy kattintson az **Auto Select** (Automatikus kiválasztás) elemre. Kattintson a „**Next**” (Tovább) gombra.

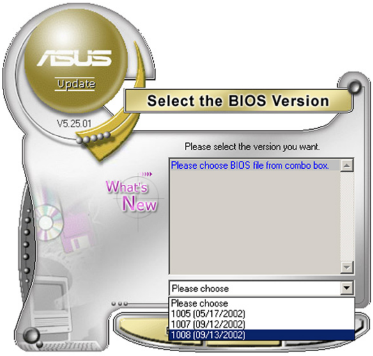

ASUS
Update
V5.23.02
Select the Update Server

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

Proxy Setting
Auto Select
ftp.asus.com.tw
Back
Cancel
Next

4. Az FTP oldalon válassza ki azt a BIOS verziót, amelyet le kíván tölteni. Kattintson a „**Next**” (Tovább) gombra.


ASUS
Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

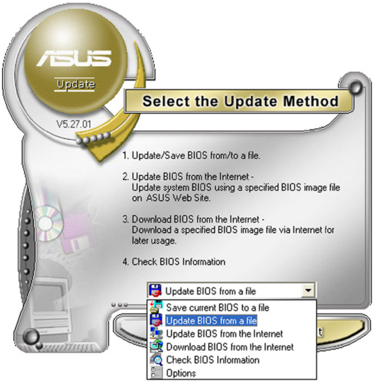
5. Kövesse a képernyőn megjelenő utasításokat a frissítés befejezéséhez.

Az ASUS Update segédprogram képes önmagát frissíteni az interneten keresztül. Mindig frissítse a segédprogramot, hogy az összes funkcióját ki tudja használni.

A BIOS frissítése BIOS-fájl segítségével

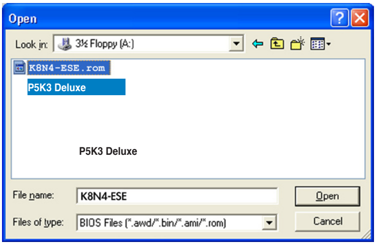
A BIOS frissítése BIOS-fájl segítségével:

1. Indítsa el az ASUS Update segédprogramot a Windows® asztalról a **Start > Programs (Programok) > ASUS > ASUSUpdate > ASUSUpdate** elemre kattintással. Megjelenik az ASUS Update főablaka.
2. Jelölje ki az Update BIOS from a file (BIOS frissítése fájlból) elemet a legördülő menüben, majd kattintson a Next (Tovább) gombra.


ASUS
Update
V5.27.01
Select the Update Method
1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Keresse meg a BIOS-fájlt az Open (Megnyitás) ablakban, majd kattintson az **„Open**” (Megnyitás) gombra.
4. Kövesse a képernyőn megjelenő utasításokat a frissítés befejezéséhez.

.


Open
Look in: 3½ Floppy (A:)
K8N4-ESE.rom
P5K3 Deluxe
P5K3 Deluxe
File name: K8N4-ESE
Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)
Open
Cancel

Ne felejtse el betölteni az alapértelmezett BIOS beállítást a rendszer kompatibilitása és stabilitása érdekében. Jelölje ki a Load Setup Defaults (Alapértelmezett beállítások betöltése) elemet az Exit (Kilépés) menüben.

2.4 ASUS BIOS Updater

Az ASUS BIOS Updater lehetővé teszi a BIOS frissítését DOS környezetben. A segédprogram lehetővé teszi az aktuális BIOS-fájl másolását is, melyet tartalékként használhat, ha BIOS meghibásodna vagy adatai megsérülnének a frissítés során.

A segédprogram soron következő képernyői csupán tájékoztató jellegűek. A segédprogram tényleges képernyői eltérhetnek az ábrázoltaktól.

A BIOS frissítése előtt

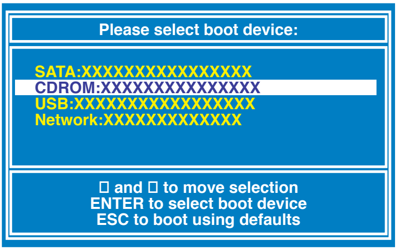
1. Készítse elő az alaplap támogató DVD-jét és egy USB flash meghajtót FAT32/16 fájlrendszerre és egyetlen partícióra formázva.
2. Töltse le a legfrisseb BIOS-fájlt és a BIOS Updater alkalmazást a weboldalunkról: http://support.asus.com, majd mentse őker az USB flash meghajtóra.

- Az NTFS fájlrendszer nem támogatott DOS környezetben. Ne mentse a BIOS-fájlt és a BIOS Updater alkalmazást merevlemez-meghajtóra vagy USB flash meghajtóra NTFS formátumban.
- Ne mentse a BIOS-fájlt hajlékonylemezre, mivel annak kicsi a kapacitása.

3. Kapcsolja ki a számítógépet és válassza le az összes SATA merevlemez-meghajtót (opcionális).

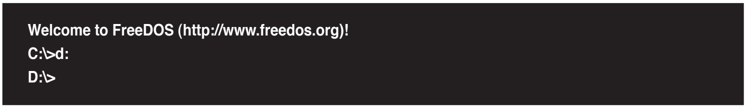
Rendszerindítás DOS alatt

1. Csatlakoztassa a legfrissebb BIOS-fájlt és a BIOS Updater alkalmazást tartalmazó USB flash lemezt az USB csatlakozóhoz.
2. Indítsa el a számítógépet. Amikor megjelenik az ASUS embléma, nyomja meg az <F8> billentyűt, hogy megjelenítse a **BIOS Boot Device Select Menu (BIOS rendszerindító eszközválasztó menü)** elemet. Helyezze a támogató DVD-t az optikai meghajtóba és válassza ki az optikai meghajtót rendszerindító eszközként.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXXX

☐ and ☐ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Amikor megjelenik a **Make Disk (Lemezkészítés)** menü, válassza ki a **FreeDOS command prompt (FreeDOS parancssor)** elemet az elem sorszámára történő kattintással.
4. A FreeDOS parancssoron gépelje be a **d:** betűt, majd nyomja meg az <Enter> gombot, hogy a lemezt a C meghajtóról (optikai meghajtó) a D meghajtóra (USB flash meghajtó) váltsa.



```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Az aktuális BIOS biztonsági mentése

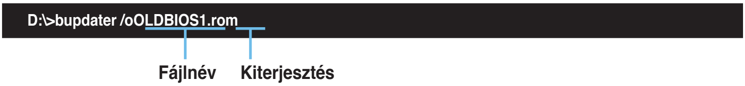
Az aktuális BIOS-fájl biztonsági mentése a BIOS Updater segítségével

---

Ellenőrizze, hogy az USB flash meghajtó, ahova másolni kívánja a fájlt nem írásvédett-e, és elegendő szabad helyet tartalmaz.

---

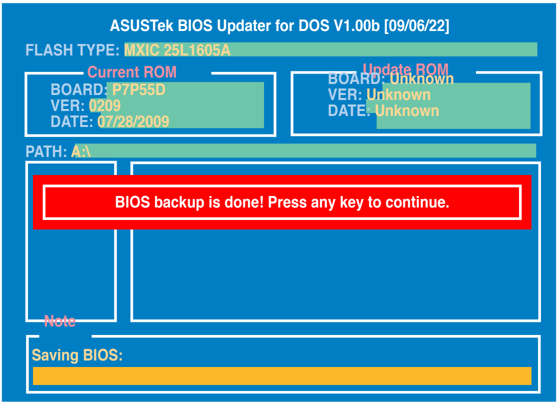
1. A FreeDOS parancssoron gépelje be a **bupdater /o[fájlnév]** szöveget, majd nyomja meg az <Enter> gombot.



```
D:\>bupdater /oOLDBIOS1.rom
```

A [fájlnév] bármilyen, a felhasználó által megadott, legfeljebb nyolc alfanumerikus karakterből álló fájlnév és három alfanumerikus karakterből álló kiterjesztés.

2. Megjelenik a BIOS Updater biztonsági mentés képernyője, ami mutatja a BIOS biztonsági másolatkészítés folyamatát. A BIOS biztonsági mentésének végén nyomjon meg egy gombot a DOS parancssorhoz történő visszatéréshez.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                 Update ROM
BOARD: P7P55D               BOARD: Unknown
VER: 0209                   VER: Unknown
DATE: 07/28/2009            DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

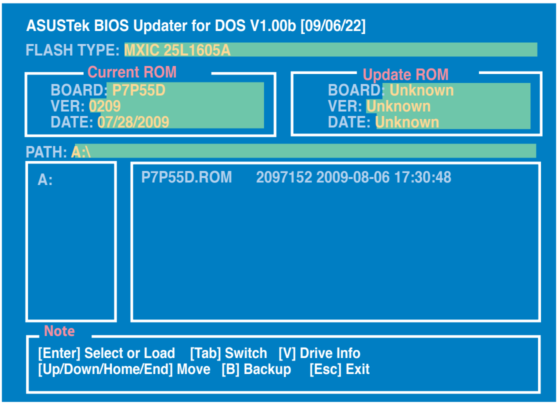
A BIOS-fájl frissítése

A BIOS-fájl frissítése a BIOS Updater segítségével

1. A FreeDOS parancssoron gépelje be a **bupdater /pc /g** szöveget, majd nyomja meg az <Enter> gombot.

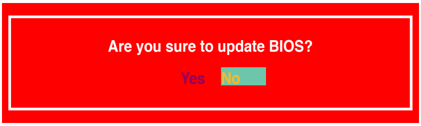
```
D:\>bupdater /pc /g
```

2. A BIOS Updater képernyő az alábbiak szerint jelenik meg.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
    Current ROM                    Update ROM
BOARD: P7P55D                  BOARD: Unknown
VER: 0209                      VER: Unknown
DATE: 07/28/2009               DATE: Unknown
PATH: A:\
A:          P7P55D.ROM    2097152 2009-08-06 17:30:48

Note
[Enter] Select or Load   [Tab] Switch   [V] Drive Info
[Up/Down/Home/End] Move   [B] Backup    [Esc] Exit
```

3. Nyomja meg a <Tab> billentyűt, hogy a képernyő mezői között váltson, és használja a <Up/Down/Home/End> billentyűket to a BIOS-fájl kiválasztásához, majd nyomja meg az <Enter> gombot. A BIOS Updater ellenőrzi a kijelölt BIOS-fájlt, majd rákérdez, kívánja-e frissíteni az aktuális BIOS-fájlt.



```
Are you sure to update BIOS?
Yes   No
```

4. Jelölje ki a **Yes (Igen)** lehetőséget, majd nyomja meg az <Enter> billentyűt. A BIOS-frissítés végén nyomja meg az <ESC> billentyűt, hogy kilépjen a BIOS Updater alkalmazásból. Indítsa újra a számítógépet.

NE kapcsolja ki vagy indítsa újra a rendszert a BIOS frissítése közben, mert ellenkező esetben nem fog indulni a számítógépe!

- Az 1.04 vagy újabb BIOS Updater verziók esetében a segédprogram a BIOS frissítése után visszatér a DOS parancssorra.
- Ne felejtse el betölteni az alapértelmezett BIOS beállítást a rendszer kompatibilitása és stabilitása érdekében. Jelölje ki a **Load Setup Defaults (Alapértelmezett beállítások betöltése)** elemet az **Exit (Kilépés)** BIOS menü alatt. A részleteket az alaplap felhasználói kézikönyvének 3. fejezetében találja meg.
- Győződjön meg arról, hogy a BIOS-fájl firssítése után csatlakoztatta az összes SATA merevlemez-meghajtót, amennyiben korábban leválasztotta őket.

3. fejezet: Hibakeresés és -elhárítás

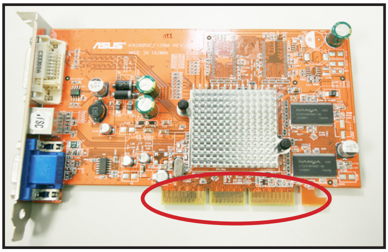
3.1 Hibaelhárítás saját összeszerelésű alaplap esetében

Miután összeszerelte számítógépét, előfordulhat, hogy nem indul el. Ez a fejezet válaszokat ad néhány gyakran feltett kérdésre a PC-vel kapcsolatban, mielőtt az operációs rendszert betöltené. Olvassa el ezt a fejezetet az alapvető hibaelhárítással kapcsolatos tájékoztatásért. Időt takaríthat meg és elkerülheti az ASUS műszaki támogatás felhívásával, illetve a termék garanciális javításra történő visszaszállításával kapcsolatos gondokat.

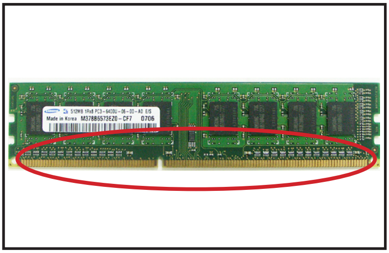
3.1.1 Alapvető hibaelhárítás

A. Laza csatlakozó

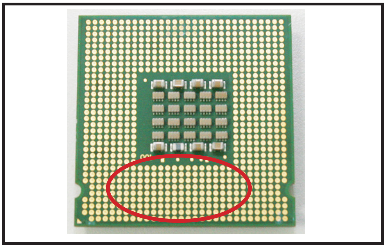
1. Győződjön meg arról, hogy az aranyozott érintkezőkön és a lábakon nincs szennyeződés
2. Használjon fültisztító pálcikát vagy radírt, és óvatosan dörzsölje le az aranyozott érintkezőt. Ne feledje eltakarítani a radír morzsáit.



VGA kártya aranyozott érintkezője



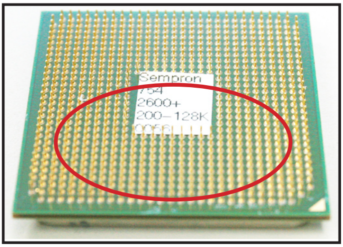
DIMM aranyozott érintkezője



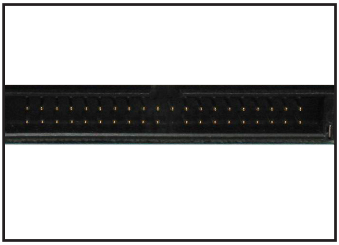
LGA775 processzor aranyozott érintkezői

A kártyát és a CPU-t a szélénél fogja meg, és NE érintse meg az aranyozott érintkezőket. Az elektrosztatikus kisülés súlyosan megrongálhatja az eszközt.

3. Győződjön meg arról, hogy a csatlakozó vagy CPU egyik érintkezője sem tört le, vagy hajlott meg. A törött és hajlított érintkező tű a részegység meghibásodását okozza. Forduljon a kereskedőjéhez további támogatásért.



AMD CPU aranyozott érintkezői

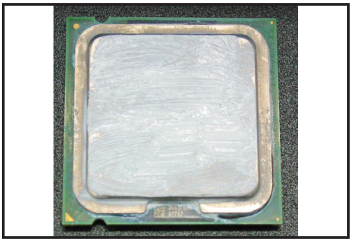


Csatlakozó érintkezői

Ha vásárlás után törtek el vagy hajlottak el az érintkezők, a kereskedő díjat számolhat fel a javításukért. Előfordulhat, hogy a törött vagy elhajlott érintkezők NEM JAVÍTHATÓAK.

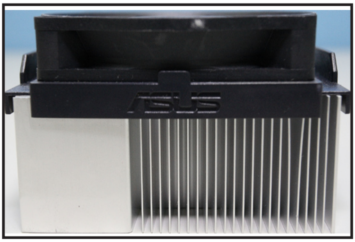
B. Túlmelegedett CPU

1. Tiszta kendővel tisztítsa meg a CPU felületét. Vigyen fel néhány cseppet a hőközvetítő pasztából a CPU azon felületére, amellyel a hűtőborda majd érintkezni fog. Győződjön meg arról, hogy egyenletes, vékony rétegben vitte fel.

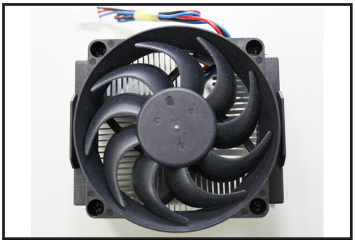


A CPU felülete

2. Győződjön meg arról, hogy a hűtőborda-ventilátor szerelvényen nincs szennyeződés.



Hűtőborda-ventilátor szerelvény oldalnézete



Hűtőborda-ventilátor szerelvény felülnézete

3. Kövesse a hűtőborda-ventilátor gyártó utasításait azon szennyeződések eltávolítását illetően, amelyek lassíthatják a ventilátor forgását.

3.2 Egyéb gyakori problémák

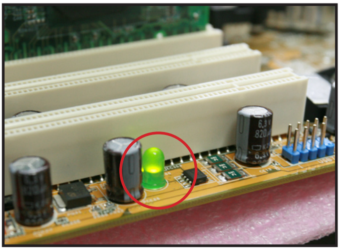
- Mielőtt eszközt távolítana el a rendszerből, győződjön meg arról, hogy az összes tápkábelt leválasztotta.
- Valamennyi hibaüzenet a Bekapcsolási Öntesztelés (POST) közben jelenik meg a képernyőn.
- Ha BIOS hangjelzéseket hall, tekintse meg az 1.11. szakaszt a részletekért.
- Olvassa el az alábbi táblázat ellenőrző listáját a további ellenőrzéshez.

	Ellenőrizendő tételek					
	Bekapcsolt állapotot jelző LED	**Képernyőkijelzés**	**Hűtőborda-ventilátor**	**BIOS hangjelzés**	**Hibaüzenet**	**Hivatkozási oldalszám**
Nincs tápfeszültség	Ki	Nem	Áll	Nem	N/A	3-4
Nincs képernyőkijelzés	Be	Nem	Áll	Nem	N/A	3-5
	Be	Nem	Fut	Nem	N/A	3-5
	Be	Nem	Fut	Igen	N//A	3-5
Nem indul az operációs rendszer	Be	Igen	Fut	Igen	Igen	3-5
	Be	Igen	Fut	Nem	Igen	3-5
	Be	Igen	Fut	Nem	Nem	3-5

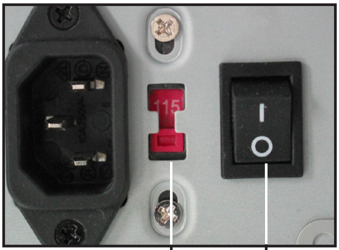
Ha a problémát megoldotta, de új probléma merül fel, tekintse át újra az ellenőrző listát. Ha a probléma továbbra is fennáll, akkor vegye fel a kapcsolatot a kereskedővel vagy az ASUS műszaki támogatásával további segítségért.

3.2.1 Nincs tápfeszültség

Az ASUS alaplapokon készenléti tápfeszültség LED található. A LED világít, jelezve, hogy az rendszer BE van kapcsolva. Ha a LED nem világít, a probléma megoldása érdekében kövesse az alábbi utasításokat.

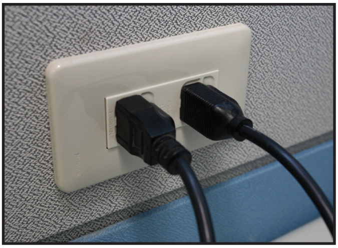


1. Győződjön meg arról, hogy a területen használt áramforrásnak megfelelően átállította a hálózati tápegységet, és hogy be van kapcsolva.


115
Hálózati feszültségbemenet választókapcsolója
Üzemkapcsoló „—”: Be, „O”: Ki

- A hálózati feszültség beállítása előtt győződjön meg arról, hogy a tápkábel dugóját kihúzta. Ennek elmulasztása a tápegység súlyos megrongálódását okozhatja.
- A tápegység megfelelő áramforrásra állításának elmulasztása a rendszer súlyos károsodásához vezethet.

2. Ügyeljen arra, hogy a konnektorhoz illő tápcsatlakozót szerel fel.
   - Csatlakoztassa a tápkábel dugóját a fali konnektorba. NE csatlakoztassa hosszabbítóhoz, szünetmentes tápegységhez (UPS) vagy egyéb eszközhöz.
   - Cserélje fel a rendszer és a monitor dugóit, hogy meggyőződjön, megfelelően működik a fali konnektor.



3. Ha a probléma továbbra is fennáll, vegye fel a kapcsolatot viszonteladójával egy új tápegység beszerzését illetően. Ha a tápegység működik, akkor vegye fel a kapcsolatot az ASUS alaplap kereskedőjével a garanciális javítást illetően.

3.2.2 Nem indul a rendszer, ill. Nincs képernyő-kijelzés

A legtöbb indítási hibát és képernyő-kijelzés hiányát hibás eszköz vagy helytelen beszerelés okozza. A probléma megoldásához kövesse az alábbi utasításokat.

1. Győződjön meg arról, hogy az összes tápkábel – a rendszerét és a monitorét is beleértve – megfelelően csatlakozik.
2. Ellenőrizze, hogy a problémát nem bővítőeszközök okozzák-e.
    - Távolítsa el az összes bővítőkártyát és eszközt. Csak az alaplapot, monitort, VGA kártyát, memóriamodulokat, tápegységet, hűtőborda-ventilátor szerelvényt, billentyűzetet és egeret használja a rendszer újraindításához.
    - Ha a rendszere normálisan működik, valószínűleg az egyik bővítőkártya okozza a problémát. Egyenként szerelje vissza a bővítőeszközöket a rendszerbe, hogy megállapítsa, melyik a hibás.
3. Ellenőrizze, hogy a problémát nem alapvető rendszereszköz okozza-e.
    - Ha tartalékeszközökkel rendelkezik, azokkal kicserélve megállapíthatja, melyik a hibás eszköz a következő sorrendben: „memóriamodul, CPU, alaplap, merevlemez/optikai lemez, billentyűzet/egér”.

Ha kiderítette, melyik eszköz a hibás, lépjen kapcsolatba a forgalmazóval a kijavítása érdekében.

3.2.3 Nem indul az operációs rendszer

1. Ha a probléma egy hardvereszköz hozzáadását követően merül fel. Távolítsa el az újonnan hozzáadott hardvert, és indítsa újra a rendszert. Ha a rendszer rendesen működik a hardver nélkül, lehet, hogy a hardvereszköz hibás, vagy nem kompatibilis a rendszerrel. Forduljon az eszköz kereskedőjéhez segítségért.
2. Ha a probléma egy szoftver vagy illesztőprogram hozzáadását követően merül fel. A probléma megoldásához kövesse az alábbi utasításokat.
    a. Indítsa el az operációs rendszert csökkentett üzemmódban, és távolítsa el a szoftvert vagy illesztőprogramot.

    b. Forduljon az operációs rendszert kiadó céghez további támogatásért.

    c. Ha az előző utasítások segítségével nem sikerül megoldani a problémát, elképzelhető, hogy formáznia kell a merevlemez-meghajtót, majd újratelepíteni az operációs rendszert.

3. Ha a probléma BIOS-beállítás módosítása után merül fel, indítsa újra a számítógépet, és töltse be az alapértelmezett BIOS-beállításokat. A részletekről az alaplap felhasználói útmutatójában olvashat.

4. Ha a probléma számítógépes vírus vagy fájlsérülés miatt merül fel, kövesse az alábbi utasításokat a probléma megoldása érdekében.

    a. Indítsa el az operációs rendszert csökkentett üzemmódban, és végezzen részletekbe menő víruskeresést vírusirtó program segítségével.

    b. Forduljon az operációs rendszert kiadó céghez további támogatásért.

    c. Ha az előző utasítások segítségével nem sikerül megoldani a problémát, elképzelhető, hogy formáznia kell a merevlemez-meghajtót, majd újratelepíteni az operációs rendszert.

3.2.4 GYIK

K1: A POST során kijelzett memória eltér az alaplapon lévő memóriától.

V1: Az eltérő memóriaméretet hibás memóriamodul okozhatja, vagy a DIMM modul nem megfelelő beszereléséből eredhet. Győződjön meg arról, hogy a DIMM modulok jó állapotban vannak, és hogy megfelelően helyezték be a DIMM modulokat. A részletekről az alaplap felhasználói útmutatójában olvashat. Ha 4,0 GB memóriát telepített, és 3,X GB memóriát jelez a rendszer, nincs meghibásodás.

K2: A rendszer nem érzékeli a hajlékonylemez-meghajtót, de a LED kijelzője folyamatosan világít.

V2: A hajlékonylemez-meghajtó kábeleit nem a megfelelő irányban csatlakoztatták. Győződjön meg arról, hogy a kábelen lévő vörös csík (1-es érintkező vége) az 1-es érintkezőhöz vezet a hajlékonylemez-meghajtón.

K3: Nem indul az operációs rendszer USB flash lemez vagy külső lemez csatlakoztatása mellett.

V3: Amikor a rendszer USB flash lemezt vagy USB csatolós merevlemezt érzékel, módosíthatja a rendszerindító eszközök elsőbbségét. Távolítsa el az USB-eszközöket, majd indítsa újra a rendszert.

K4: Windows XP telepítése esetén a rendszer nem tudja érzékelni a RAID-vezérlőhöz csatlakoztatott merevlemez-meghajtókat.

V4: A Windows XP nem tartalmazza a RAID-vezérlő illesztőprogramjait, ezért a rendszer nem tudja érzékelni a merevlemez-meghajtókat. Másolja a RAID-vezérlő illesztőprogramját egy hajlékonylemezre, és amikor a Windows XP-t tartalmazó lemezről indítja a rendszert, nyomja meg az <F6> gombot, hogy beolvassa az illesztőprogramot a hajlékonylemezről. A részletekről az alaplap felhasználói útmutatójában olvashat.

4. fejezet: Tanácsok a számítógép gondozásához

4.1 A számítógép helyes gondozása

Az Ön személyi számítógépe olyan, mint a többi háztartásban fellelhető i készülék. Tartsa távol a számítógépet a párától, a közvetlen napsütéstől és az elektromos kisülések forrásától. Nem tanácsos mozgatni a számítógépet bekapcsolt állapotban, mert ezzel megrongálhatja. A belsejében összegyűlő por befolyásolhatja a lemezmeghajtók működését, és átfogó problémát okozhat, amitől összeomolhat a rendszer, vagy megsérülhetnek a részegységek.

4.2 Alapvető tudnivalók

1. Ha nem használja a számítógépet, tegyen rá porvédő borítást.
2. Ha a számítógépet használja, ne tegyen semmit a monitor tetejére, ami eltakarja a szellőzőnyílásokat. A felgyülemlő hő a monitor meghibásodását okozhatja.
3. Ne helyezze a számítógépházat túl közel a falhoz, és hagyjon elegendő helyet a hőleadáshoz. A túlmelegedés a rendszer összeomlásához vezethet.
4. A számítógépet stabil felületre állítsa.
5. A számítógépet tartsa távol a szélsőséges hőmérsékletű helyektől. Az 5°C és 30°C között környezeti hőmérséklet az ideális. Használjon légkondicionáló készüléket vagy elektromos ventilátort a jobb hőleadás érdekében.
6. A szalagkábeleket rendezetten helyezze el, hogy megakadályozza az elégtelen légáramlás kialakulását.

4.3. Használati tudnivalók

1. Kapcsolja be és ki a számítógépet rendszeresen. Ha az Ön számítógépének sokáig bekapcsolva kell lennie, használjon jobb minőségű rendszer-/CPU-ventilátort és nagyfeszültségű tápegységet.
2. A hirtelen áramkimaradástól megsérülhet a merevlemez-meghajtó. Ha az áramforrás megbízhatatlan, tanácsos beszereznie egy szünetmentes tápegységet a számítógéphez.
3. Rendszeres időközönként rendezze át az adatfájlokat, végezzen víruskeresést, frissítse a vírusdefiníciókat és töredezettség-mentesítse a merevlemezt.
4. Rendszeresen portalanítsa és tisztítsa a számítógépet. (Tisztítás előtt válassza le az összes tápkábelt.)
    - Szerelje ki az alaplapot és a merevlemez/optikai lemezmeghajtókat, majd tisztítsa meg őket sűrített levegős palackkal vagy egy puha ecsettel.

    - Antisztatikus porszívóval távolítsa el a por- és hajdarabkákat a tápegységből.

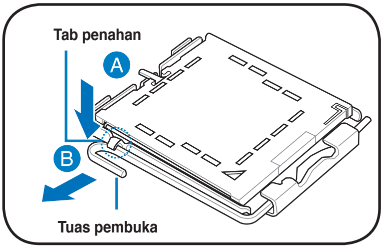
4.4 Tanácsok

1. Ha a számítógépet nem tervezi hosszú idei használni, tegyen a házba páramentesítő tasakot a nedvesség által okozott kár megelőzésé érdekében.
2. Egyes forró és párás klímájú területeken tanácsos kéthetente bekapcsolni a számítógépet. Ezzel megelőzhetők a nedvesség okozta károk is.

Bagian 1: Petunjuk Mulai Cepat

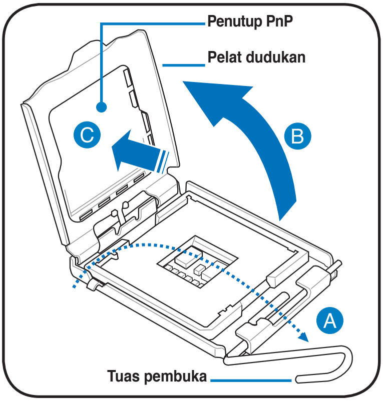
1.1 Memasang CPU

1.1.1 Soket Intel® LGA775


Tab penahan
A
B
Tuas pembuka

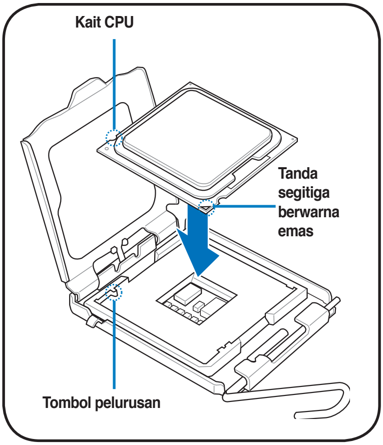
1. Cari soket CPU di motherboard.
2. Tekan tuas pembuka dengan ibu jari Anda (A), kemudian geser ke kiri (B) hingga terlepas dari tab penahan.

Agar pin soket tidak rusak, jangan lepas penutup PnP, kecuali jika Anda memasang CPU.


Penutup PnP
Pelat dudukan
C
B
A
Tuas pembuka

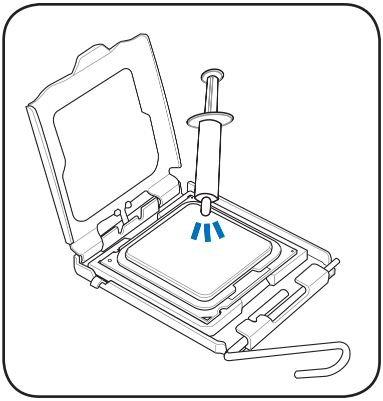
3. Angkat tuas pembuka searah tanda panah hingga sudut 135º.
4. Angkat pelat dudukan dengan ibu jari dan telunjuk hingga sudut 100º (4A). lalu dorong penutup PnP dari jendela pelat pemasangan untuk mengeluarkan (4B).

6. Letakkan CPU di atas soket, pastikan segitiga berwarna emas terdapat di sudut kiri bawah soket, kemudian pasang tombol pelurusan soket ke kait CPU.



CPU hanya dapat dipasang pada satu arah yang benar. JANGAN pasang CPU ke soket secara paksa agar konektor pada soket tidak tertekuk dan CPU tidak rusak!

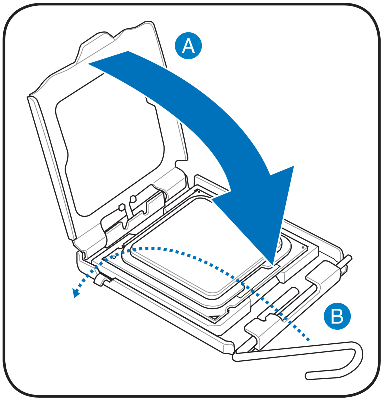
6. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

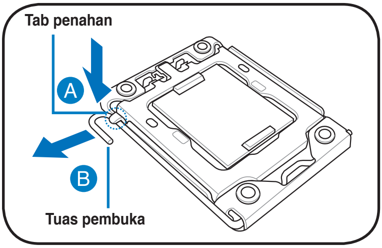
7. Tutup pelat dudukan (A), kemudian dorong tuas pembuka (B) hingga terpasang dengan kencang pada tab penahan.



1.1.2 Soket Intel® LGA1366

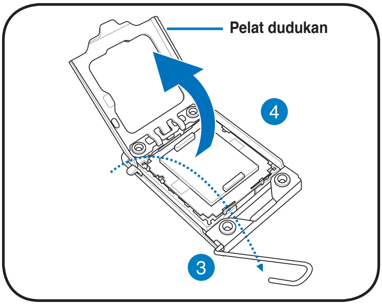
1. Cari soket CPU di motherboard.

2. Tekan tuas pembuka dengan ibu jari Anda (A), kemudian geser ke kiri (B) hingga terlepas dari tab penahan.

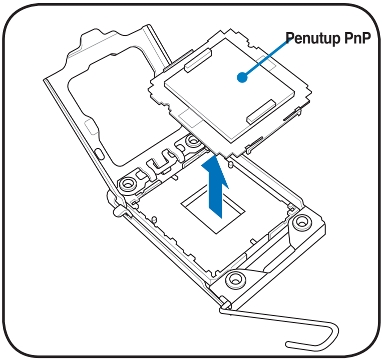

Tab penahan
A
B
Tuas pembuka

Agar pin soket tidak rusak, jangan lepas penutup PnP, kecuali jika Anda memasang CPU.

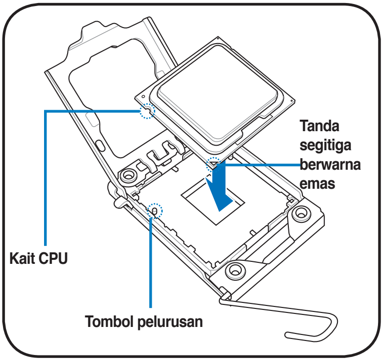
3. Angkat tuas pembuka searah tanda panah hingga sudut 135º.
4. Angkat pelat dudukan dengan ibu jari dan telunjuk hingga sudut 100º


Pelat dudukan
4
3

5. Lepaskan penutup PnP dari soket CPU.

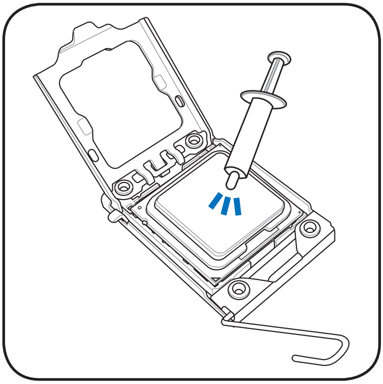

Penutup PnP

6. Letakkan CPU di atas soket, pastikan segitiga berwarna emas terdapat di sudut kiri bawah soket, kemudian pasang tombol pelurusan soket ke kait CPU.



CPU hanya dapat dipasang pada satu arah yang benar. JANGAN pasang CPU ke soket secara paksa agar konektor pada soket tidak tertekuk dan CPU tidak rusak!

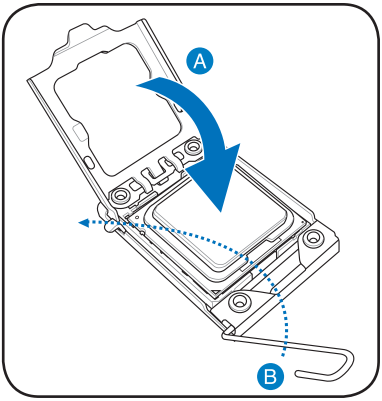
7. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

8. Tutup pelat dudukan (A), kemudian dorong tuas pembuka (B) hingga terpasang dengan kencang pada tab penahan.

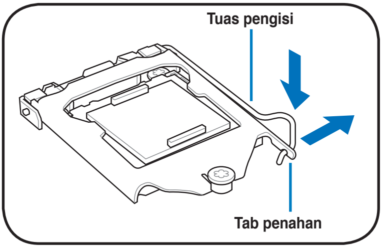


1.1.3 Soket Intel® LGA1156

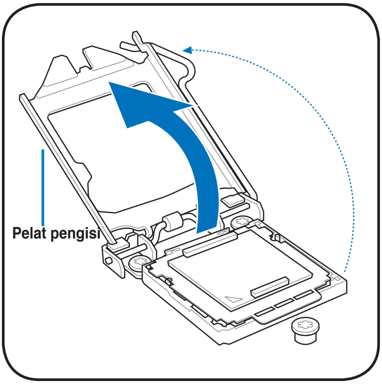
Az LGA1155 CPU nem kompatibilis az LGA1156 foglalattal. NE szereljen LGA1155 CPU-t az LGA1156 foglalatba.

1. Cari soket CPU pada motherboard.
2. Tekan tuas pengisi dengan ibu jari Anda (A), kemudian pindahkan ke kanan (B) hingga terlepas dari tab penahannya.

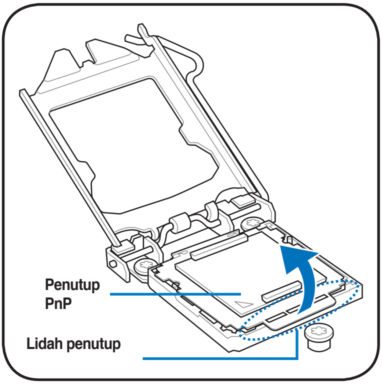
Agar pin soket tidak rusak, jangan lepas penutup PnP, kecuali jika Anda sedang memasang CPU.



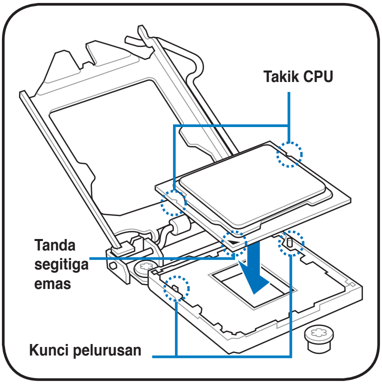
3. Angkat tuas pengisi sesuai arah tanda panah hingga pelat pengisi terangkat sepenuhnya.



4. Lepaskan penutup PnP dari soket CPU hanya dengan mengangkat tab.

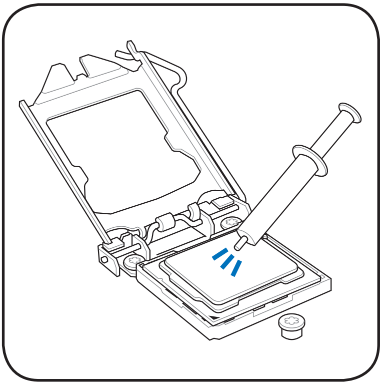


5. Posisikan CPU di atas soket, pastikan tanda segitiga emas berada di sudut kiri-bawah soket, lalu pasang kunci pelurusan soket ke takik CPU.



CPU hanya dapat dipasang dengan satu arah yang benar. Agar konektor pada soket tidak bengkok dan CPU tidak rusak, JANGAN masukkan CPU ke dalam soket dengan paksa!

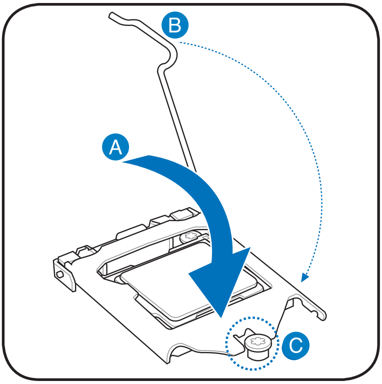
6. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



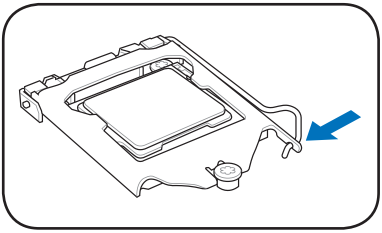
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

7. Tutup pelat pengisi (A), lalu dorong tuas pengisi ke bawah (B), pastikan tepi depan pelat pengisi bergeser di bawah kunci penahan (C).



8. Masukkan tuas pengisi ke bawah tab penahan.

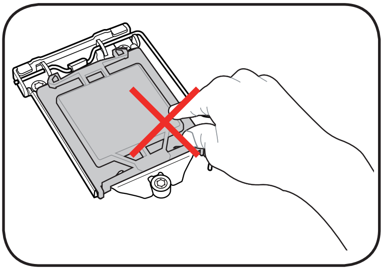


1.1.4 Soket Intel LGA1155 (Tutup PnP di atas pelat pemasangan)

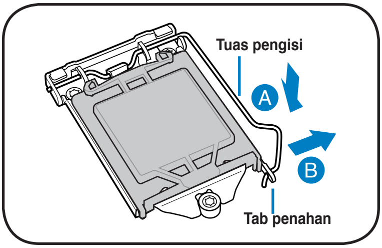
Az LGA1156 CPU nem kompatibilis az LGA1155 foglalattal. NE szereljen LGA1156 CPU-t az LGA1155 foglalatba.

1. Cari soket CPU pada motherboard.

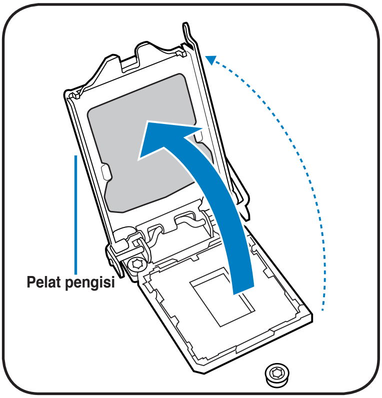
2. Pastikan Anda tidak melepas tutup PnP dari soket CPU sebelum memasang CPU.



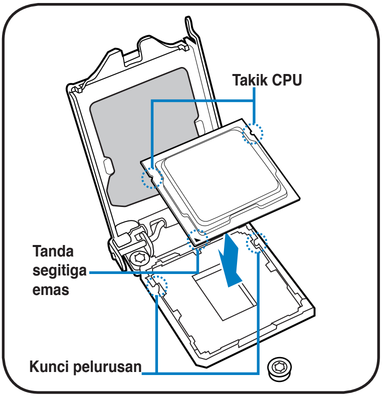
3. Tekan tuas pengisi dengan ibu jari Anda (A), kemudian pindahkan ke kanan (B) hingga terlepas dari tab penahannya.



4. Angkat tuas pengisi sesuai arah tanda panah hingga pelat pengisi terangkat sepenuhnya.

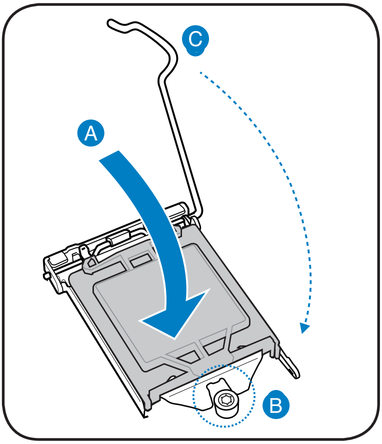


5. Posisikan CPU di atas soket, pastikan tanda segitiga emas berada di sudut kiri-bawah soket, lalu pasang kunci pelurusan soket ke takik CPU.

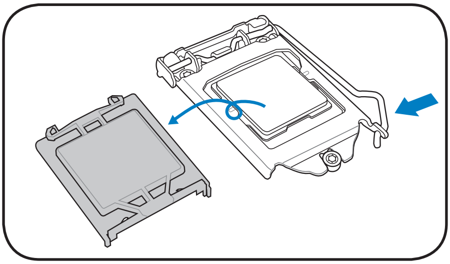


CPU hanya dapat dipasang dengan satu arah yang benar. Agar konektor pada soket tidak bengkok dan CPU tidak rusak, JANGAN masukkan CPU ke dalam soket dengan paksa!

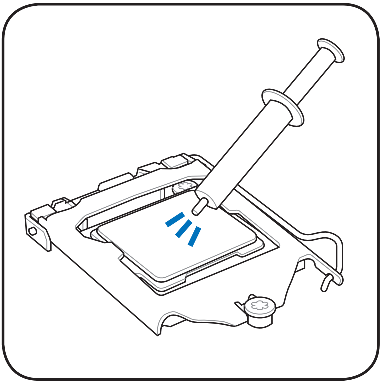
6. Tutup pelat pemasangan (A) dan pastikan bagian depannya masuk ke kunci penahan (B). Setelah itu, tekan tuas pemasangan (C).



7. Sisipkan tuas pemasangan ke tab penahan untuk melepas tutup PnP dari soket CPU.



8. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



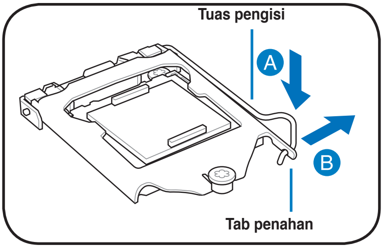
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

1.1.5 Soket Intel® LGA1155 (Tutup PnP di bawah pelat pemasangan)

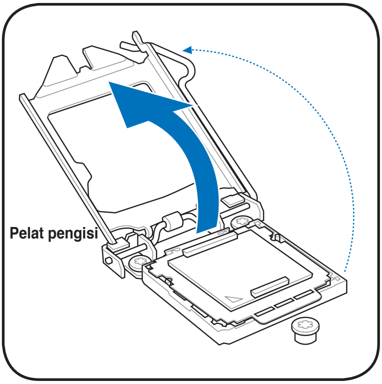
Az LGA1156 CPU nem kompatibilis az LGA1155 foglalattal. NE szereljen LGA1156 CPU-t az LGA1155 foglalatba.

1. Cari soket CPU pada motherboard.
2. Tekan tuas pengisi dengan ibu jari Anda (A), kemudian pindahkan ke kanan (B) hingga terlepas dari tab penahannya.

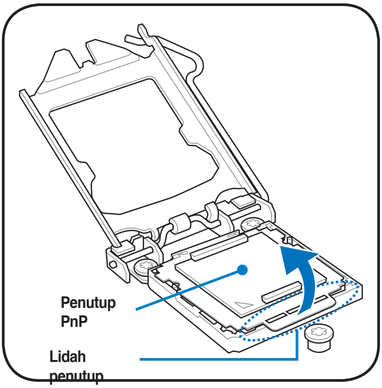


Agar pin soket tidak rusak, jangan lepas penutup PnP, kecuali jika Anda sedang memasang CPU.

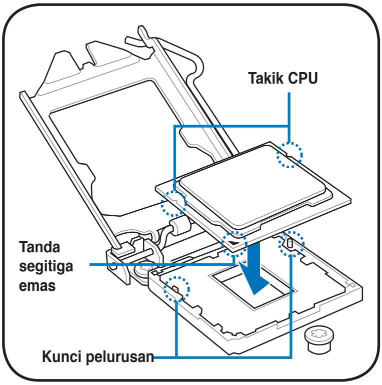
3. Angkat tuas pengisi sesuai arah tanda panah hingga pelat pengisi terangkat sepenuhnya.



4. Lepaskan penutup PnP dari soket CPU hanya dengan mengangkat tab.

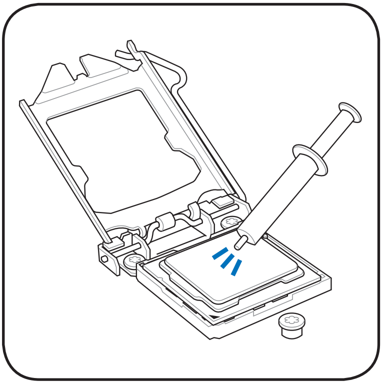


5. Posisikan CPU di atas soket, pastikan tanda segitiga emas berada di sudut kiri-bawah soket, lalu pasang kunci pelurusan soket ke takik CPU.



CPU hanya dapat dipasang dengan satu arah yang benar. Agar konektor pada soket tidak bengkok dan CPU tidak rusak, JANGAN masukkan CPU ke dalam soket dengan paksa!

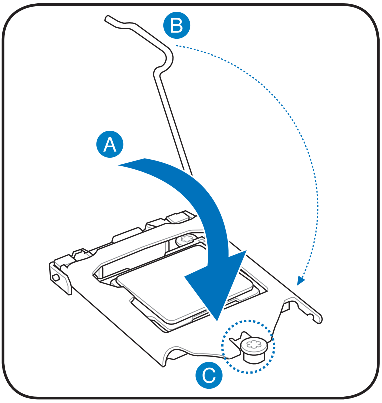
6. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



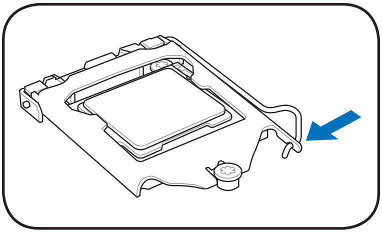
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

7. Tutup pelat pengisi (A), lalu dorong tuas pengisi ke bawah (B), pastikan tepi depan pelat pengisi bergeser di bawah kunci penahan (C).

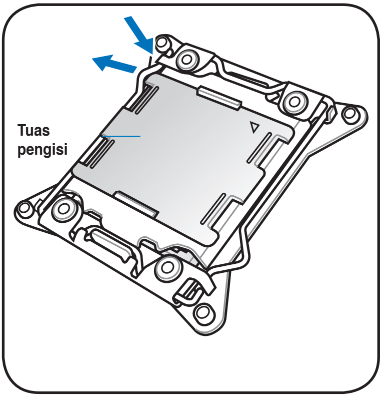


8. Masukkan tuas pengisi ke bawah tab penahan.



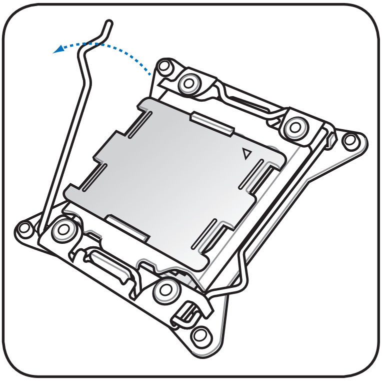
1.1.6 Soket Intel® LGA2011

1. Cari soket CPU di motherboard.
2. Tekan tuas pembuka dengan ibu jari Anda (A), kemudian geser ke kiri (B) hingga terlepas dari tab penahan.

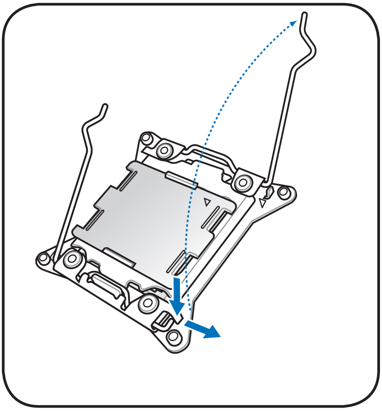


Agar pin soket tidak rusak, jangan lepas penutup PnP, kecuali jika Anda memasang CPU.

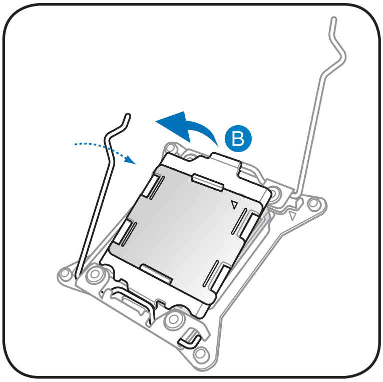
3. Angkat perlahan tuas pembuka sesuai arah tanda panah.



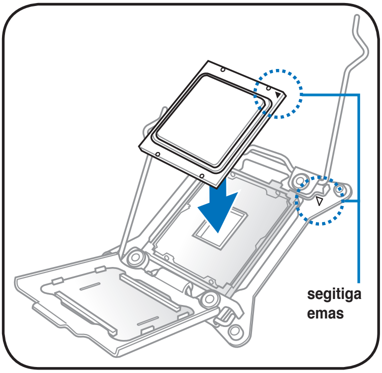
4. Tutup pelat pengisi (A), lalu dorong tuas pengisi ke bawah (B), pastikan tepi depan pelat pengisi bergeser di bawah kunci penahan (C). Angkat perlahan tuas pembuka sesuai arah tanda panah (C).



5. Tekan tuas pembuka di sisi kiri (A) untuk mengangkat pelat pembuka (B).

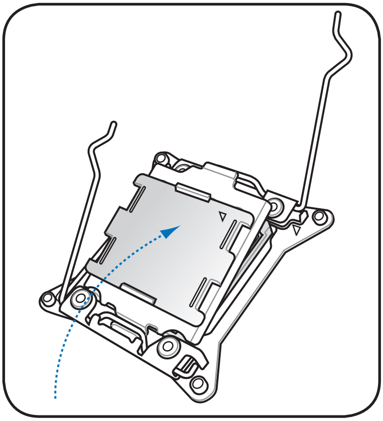


6. Letakkan CPU di atas soket dengan memastikan tanda segitiga berada di sudut kanan atas soket.

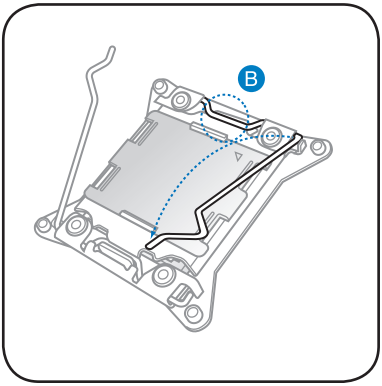


CPU hanya dapat dipasang pada satu arah yang benar. JANGAN pasang CPU ke soket secara paksa agar konektor pada soket tidak tertekuk dan CPU tidak rusak!

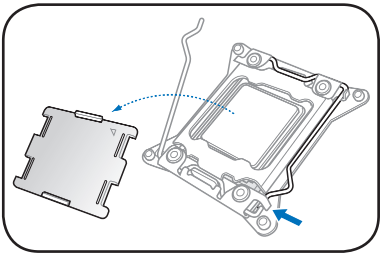
7. Tutup piring beban.



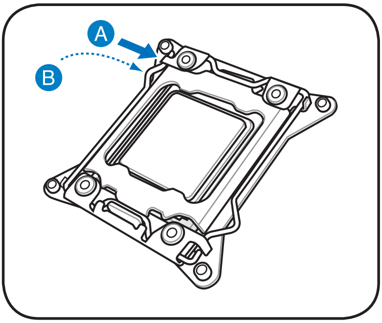
8. Dorong ke bawah tuas pengisi kanan (A) dengan memastikan tepi pelat pengisi terkunci oleh tuas (B).



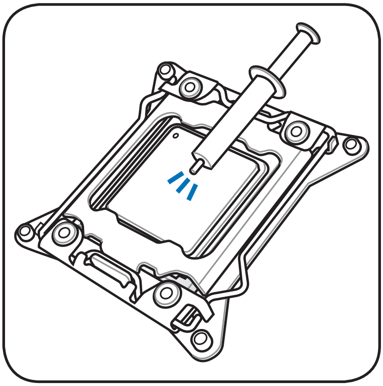
9. Masukkan tuas pengisi kanan ke bawah tab penahan. Lepaskan penutup PnP dari soket CPU.



10. Dorong ke bawah tuas pengisi kiri (A), lalu masukkan tuas ke bawah tab penahan (B).



11. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



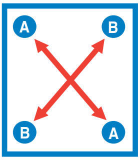
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

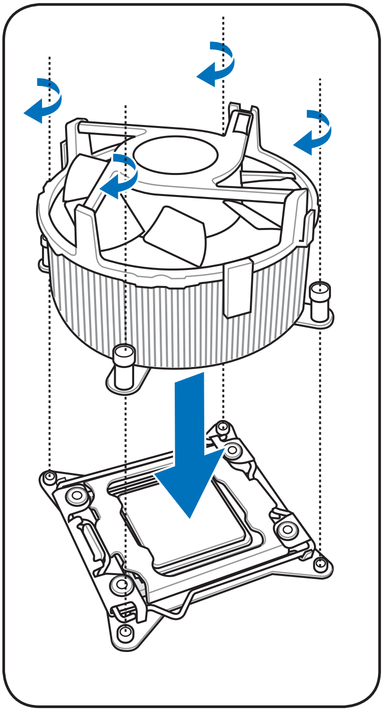
Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

12. Letakkan heatsink di atas CPU yang terpasang, lalu pastikan keempat alat pengunci telah sejajar dengan lubang pada soket CPU.

13. Putar masing-masing sekrup tersebut dengan obeng Philips (plus) untuk memasang heatsink pada soket CPU. Setelah keempat sekrup terpasang, kencangkan satu per satu hingga heatsink terpasang dengan benar pada tempatnya.

Kencangkan keempat sekrup heatsink sesuai urutan diagonal..



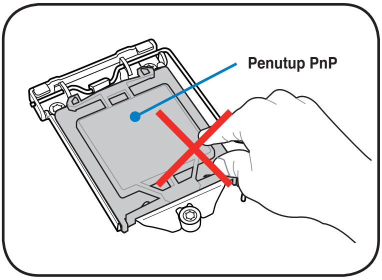


1.1.7 Soket Intel® LGA1150 (Tutup PnP di atas pelat pemasangan)

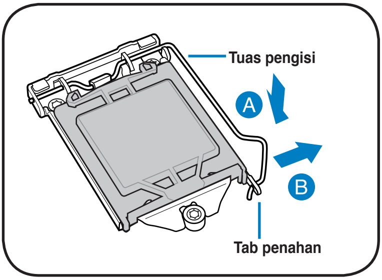
Pastikan Anda memasang CPU yang benar dan hanya dirancang untuk soket LGA1150. JANGAN pasang CPU yang dirancang untuk soket LGA1155 dan LGA1156 di soket LGA1150.

1. Cari soket CPU pada motherboard.

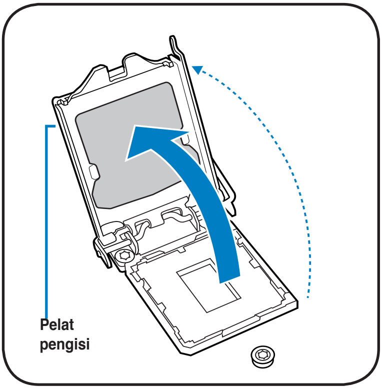
JANGAN lepas penutup PnP dari soket CPU. Tindakan tersebut dapat menekuk pin pada soket. Lihat gambar di bawah ini untuk mengetahui lokasi penutup PnP.



2. Tekan tuas pengisi dengan ibu jari Anda (A), kemudian pindahkan ke kanan (B) hingga terlepas dari tab penahannya.

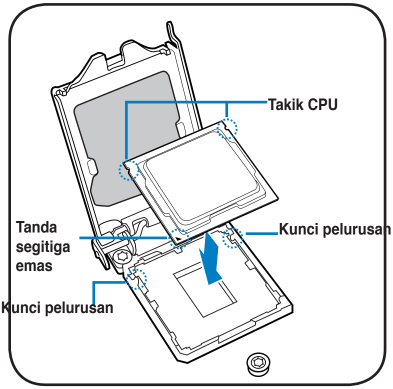


3. Angkat tuas pengisi sesuai arah tanda panah hingga pelat pengisi terangkat sepenuhnya.

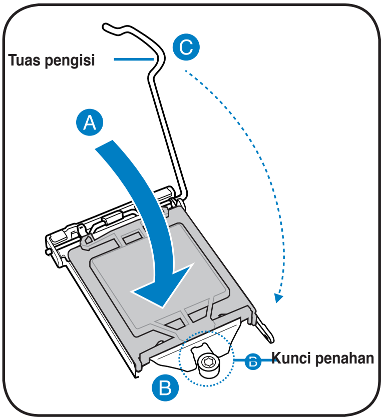


4. Posisikan CPU di atas soket, pastikan tanda segitiga emas berada di sudut kiri-bawah soket,lalu sesuaikan takik CPU dengan kunci pelurus soket.

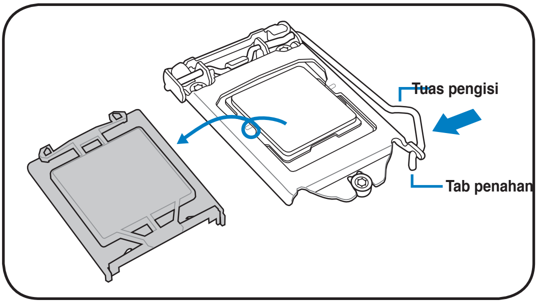
CPU hanya dapat dipasang dengan satu arah yang benar. Agar konektor pada soket tidak bengkok dan CPU tidak rusak, JANGAN masukkan CPU ke dalam soket dengan paksa!


Takik CPU
Tanda segitiga emas
Kunci pelurusan
Kunci pelurusan

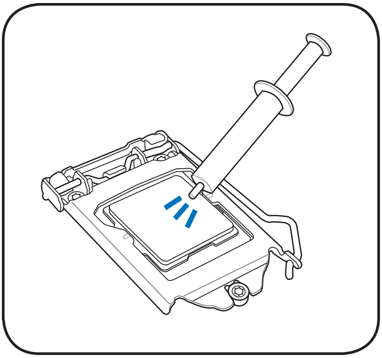
5. Tutup pelat pemasangan (A) dan pastikan bagian depannya masuk ke kunci penahan (B). Setelah itu, tekan tuas pemasangan (C).


Tuas pengisi
C
A
B
Kunci penahan
B

6. Sisipkan tuas pemasangan ke tab penahan untuk melepas tutup PnP dari soket CPU.


Tuas pengisi
Tab penahan

7. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

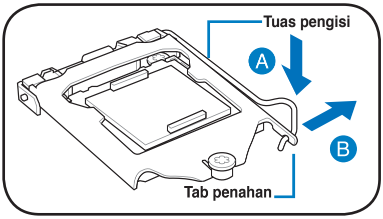
Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

1.1.8 Soket Intel® LGA1150 (Tutup PnP di bawah pelat pemasangan)

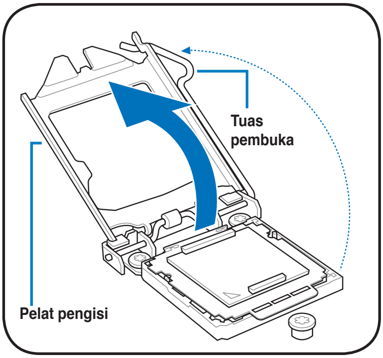
Pastikan Anda memasang CPU yang benar dan hanya dirancang untuk soket LGA1150. JANGAN pasang CPU yang dirancang untuk soket LGA1155 dan LGA1156 di soket LGA1150.

1. Cari soket CPU pada motherboard.
2. Tekan tuas pengisi dengan ibu jari Anda (A), kemudian pindahkan ke kanan (B) hingga terlepas dari tab penahannya.

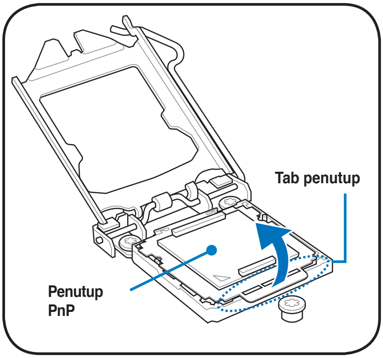
JANGAN lepas penutup PnP dari soket CPU. Tindakan tersebut dapat menekuk pin pada soket.


Tuas pengisi
A
B
Tab penahan

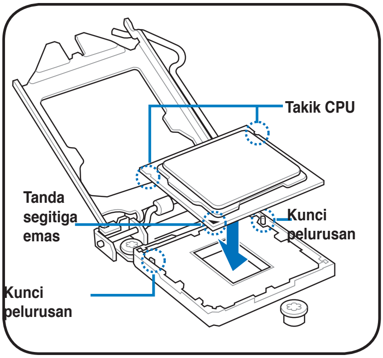
3. Angkat tuas pengisi sesuai arah tanda panah hingga pelat pengisi terangkat sepenuhnya


Tuas pembuka
Pelat pengisi

4. Lepaskan penutup PnP dari soket CPU hanya dengan mengangkat tab.

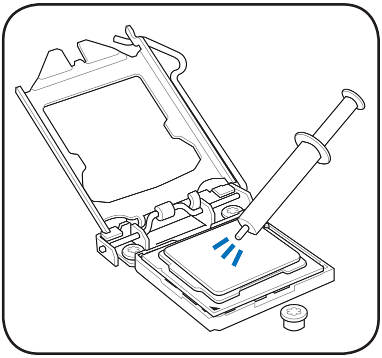

Tab penutup
Penutup PnP

5. Posisikan CPU di atas soket, pastikan tanda segitiga emas berada di sudut kiri-bawah soket, lalu sesuaikan takik CPU dengan kunci pelurus soket.


Takik CPU
Tanda segitiga emas
Kunci pelurusan
Kunci pelurusan

CPU hanya dapat dipasang dengan satu arah yang benar. Agar konektor pada soket tidak bengkok dan CPU tidak rusak, JANGAN masukkan CPU ke dalam soket dengan paksa!

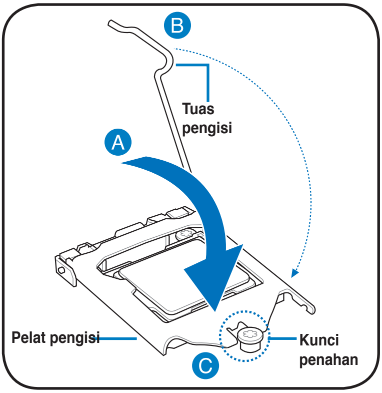
6. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



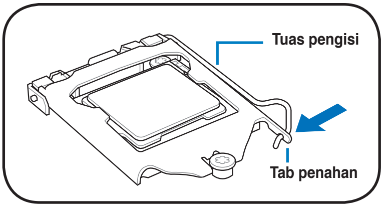
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesiona.

7. Tutup pelat pengisi (A), lalu dorong tuas pengisi ke bawah (B), pastikan tepi depan pelat pengisi bergeser di bawah kunci penahan (C).


B
Tuas pengisi
A
Pelat pengisi
Kunci penahan
C

8. Masukkan tuas pengisi ke bawah tab penahan.

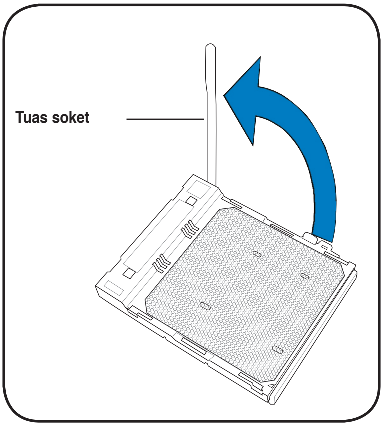

Tuas pengisi
Tab penahan

1.1.9 Soket AMD AM2 / AM2+ AM3

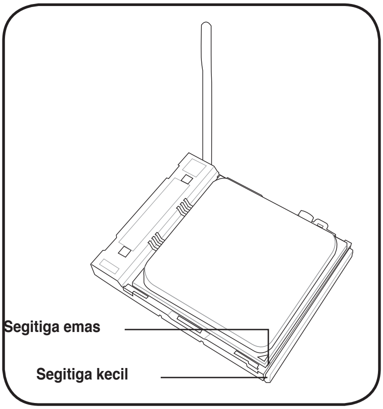
- Soket AMD AM2 dan AM2+ kompatibel dengan prosesor AMD AM2, AM2+, dan AM3.
- Soket AMD AM3 kompatibel dengan prosesor AMD AM3. JANGAN pasang prosesor AMD AM2+/AM2 di soket AM3. Hanya model motherboard AM3 tertentu yang mendukung prosesor AM3+ dengan meng-upgrade BIOS. Untuk informasi rinci, lihat situs dukungan ASUS.

1. Cari soket CPU di motherboard.
2. Tekan tuas secara menyamping untuk membuka penguncian soket, kemudian angkat hingga membentuk sudut 90º.

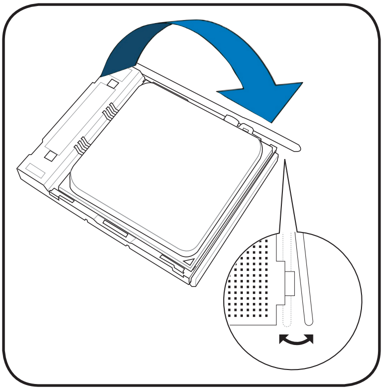
Pastikan tuas soket diangkat hingga sudut 90º. Jika tidak, CPU tidak akan terpasang sepenuhnya.



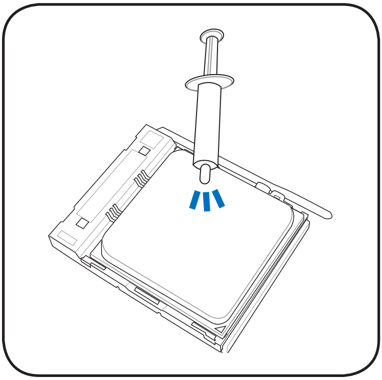
3. Letakkan CPU di atas soket hingga sudut CPU bertanda segitiga berwarna emas sejajar dengan sudut soket bertanda segitiga kecil.
4. Masukkan CPU secara perlahan ke soket hingga terpasang dengan benar pada tempatnya.



5. Bila CPU telah terpasang, dorong ke bawah tuas soket untuk mengencangkan CPU. Bunyi klik akan terdengar pada tab di bagian samping untuk menunjukkan bahwa tuas telah terkunci.



6. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



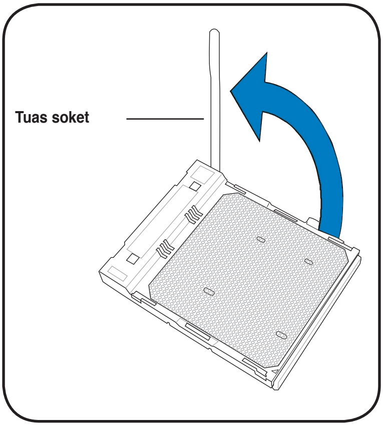
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

1.1.8 Soket AMD AM3+

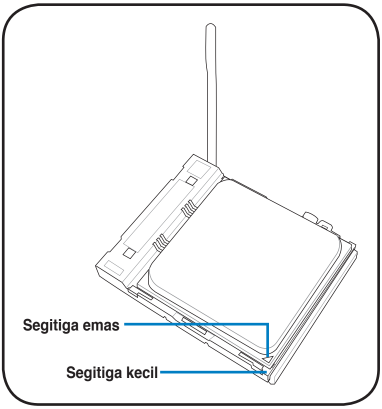
Soket AMD AM3+ kompatibel dengan prosesor AMD AM3+ dan AM3. Hanya model motherboard AM3 tertentu yang mendukung prosesor AM3+ dengan meng-upgrade BIOS. Untuk informasi rinci, lihat situs dukungan ASUS.

1. Cari soket CPU di motherboard.
2. Tekan tuas secara menyamping untuk membuka penguncian soket, kemudian angkat hingga membentuk sudut 90º.

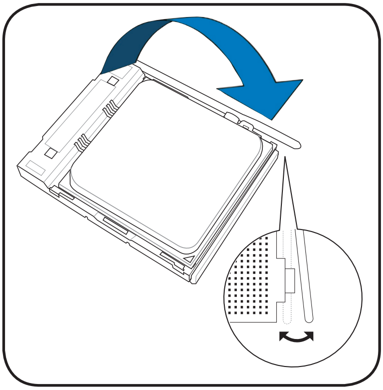


Pastikan tuas soket diangkat hingga sudut 90º. Jika tidak, CPU tidak akan terpasang sepenuhnya.

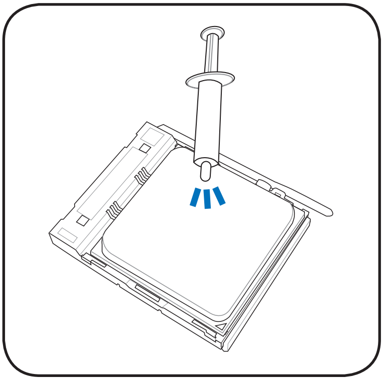
3. Letakkan CPU di atas soket hingga sudut CPU bertanda segitiga berwarna emas sejajar dengan sudut soket bertanda segitiga kecil.
4. Masukkan CPU secara perlahan ke soket hingga terpasang dengan benar pada tempatnya.



5. Bila CPU telah terpasang, dorong ke bawah tuas soket untuk mengencangkan CPU. Bunyi klik akan terdengar pada tab di bagian samping untuk menunjukkan bahwa tuas telah terkunci.



6. Oleskan Materi Interface Thermal ke bagian terbuka pada CPU yang akan tersentuh heatsink. Pastikan Materi Interface Thermal dioleskan secara merata dan tipis.



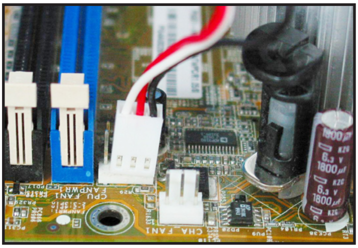
Beberapa heatsink dilengkapi pelumas thermal yang telah dioleskan sebelumnya. Jika demikian, abaikan langkah ini.

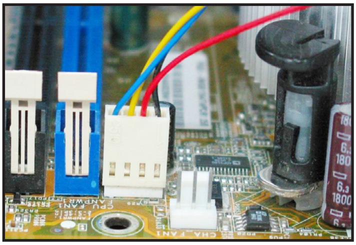
Materi Interface Thermal beracun dan tidak dapat dimakan. JANGAN dimakan. Jika terkena mata atau kulit, segera cuci dan dapatkan bantuan medis profesional.

1.2 Memasang heatsink (penurun panas) dan fan (kipas angin)

Memasang CPU heatsink and fan (Kipas angin dan penurun panas CPU):

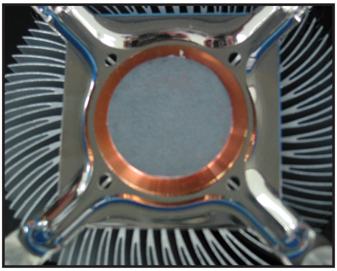
1. Pilih heatsink (penurun panas) dan fan (kipas angin) bersertifikat AMD atau bersertifikat Intel yang dibuat untuk motherboard (papan induk) Anda. Terdapat 3-pin (left) and 4-pin (right) fan connectors (konektor kipas angin 3-pin (kiri) dan 4-pin (kanan)). Hanya CPU fans (kipas angin CPU) dengan 4-pin connectors (konektor 4-pin) yang mendukung teknologi ASUS Q-Fan (Kipas angin-Q ASUS).





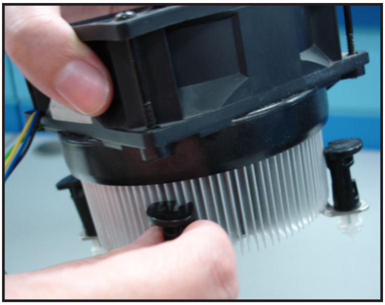
Untuk Intel-certified heatsink (penurun panas bersertifikat Intel):

2. Beberapa heatsinks (penurun panas) akan dilengkapi dengan thermal paste pre-applied (perekat panas yang dipasang sebelumnya). Jika tidak, jangan menggeseknya dan hanya melepaskan protective film (pelindung filem) sebelum pemasangan. Jika tidak, sebelum memasang heatsink (penurun panas), gunakan beberapa tetes thermal paste (perekat panas) untuk membuka area CPU tempat heatsink (penurun panas) akan terhubung. Pastikan bahwa perekat ini akan menyerap ke dalam bahkan pada lapisan tipis sekalipun.

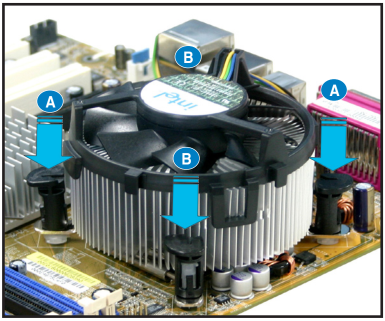


Untuk mencegah kontaminasi paste (perekat), JANGAN oleskan paste (perekat) dengan jari-jari tangan Anda secara langsung.

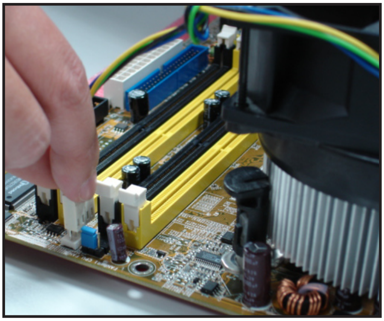
3. Orientasikan setiap fastener (pengunci) dengan alur akhir yang menyempit ke arah luar.



4. Tekan ke bawah fastener (pengunci) sekaligus pada rangkaian diagonal untuk mengunci heatsink (penurun panas) dan fan (kipas angin) terpasang di tempatnya.



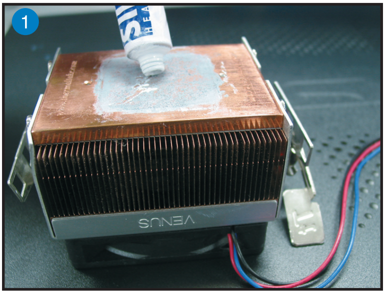
5. Sambungkan CPU fan cable (kabel kipas angin CPU) ke connector (konektor) yang sesuai pada motherboard (papan induk).

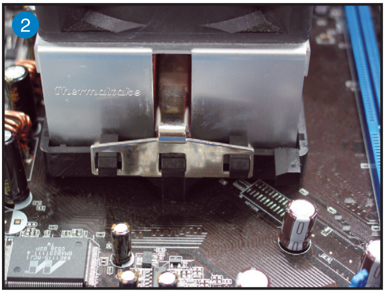


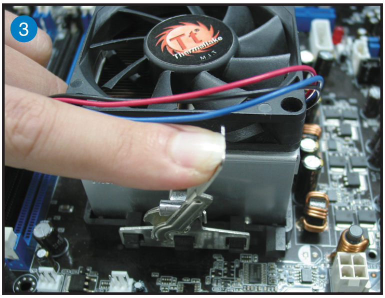
JANGAN lupa menyambungkan CPU fan connector (Konektor kipas angin CPU)! Hardware (Perangkat keras) memonitor kesalahan yang dapat terjadi jika Anda gagal memasangkan connector (konektor) ini dan kami menyarankan Anda menggunakan omnidirectional heatsink (penurun panas omnidireksional) mendapatkan penghilangan panas yang maksimum.

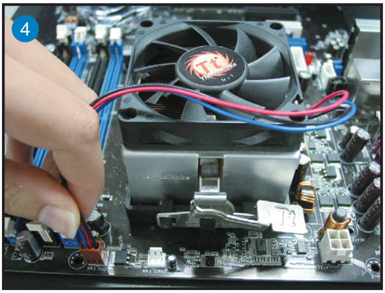
Untuk AMD-certified heatsink (penurun panas bersertifikat AMD):

Ikuti petunjuk di bawah ini untuk memasang AMD-certified heatsink (penurun panas bersertifikat AMD).







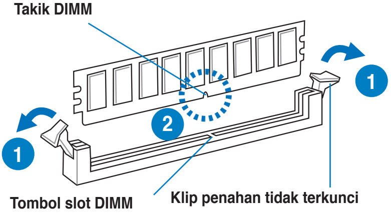


1.3 Memasang DIMM

Pastikan untuk melepaskan sambungan catu daya sebelum menambah maupun melepaskan DIMM atau komponen sistem lainnya. Mengabaikan petunjuk ini dapat menyebabkan kerusakan parah pada motherboard dan komponen.

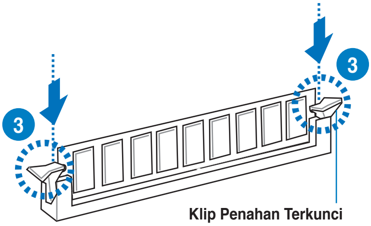
Memasang DIMM pada soket DIMM klip ganda

1. Buka kunci soket DIMM dengan menekan klip penahan ke arah luar.
2. Sejajarkan DIMM pada soket agar kait pada DIMM sesuai dengan tombol slot DIMM pada soket.



DIMM dikunci dengan kait sehingga hanya dapat dipasang ke satu arah. JANGAN pasang DIMM ke soket dengan arah yang salah agar DIMM tidak rusak.

3. Pegang kedua ujung DIMM, lalu masukkan DIMM secara vertikal ke soket. Untuk memastikan DIMM terpasang dengan benar, dorong kedua ujung DIMM dengan kuat secara bersamaan hingga klip penahan terpasang pada tempatnya dan DIMM tidak dapat didorong lebih jauh lagi.

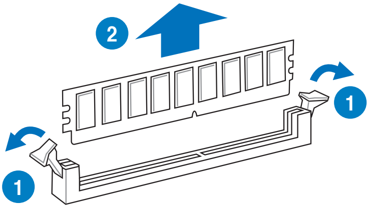


Selalu masukkan DIMM ke soket secara VERTIKAL agar kait DIMM tidak rusak.

- Untuk memasang dua atau lebih DIMM, lihat panduan pengguna yang diberikan dalam kemasan motherboard.
- Untuk daftar vendor resmi modul memori, lihat panduan pengguna.

Melepaskan DIMM dari soket DIMM dua klip

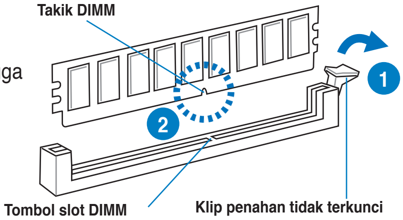
1. Tekan klip penahan ke arah luar secara bersamaan untuk membuka penguncian DIMM.
2. Lepaskan DIMM dari soket.



Tahan DIMM dengan hati-hati menggunakan jari Anda saat menekan klip penahan. DIMM dapat rusak bila dilepaskan dengan tenaga yang berlebihan.

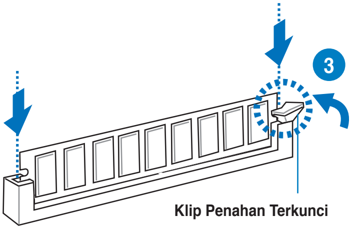
Memasang DIMM pada soket DIMM klip tunggal

1. Buka kunci soket DIMM dengan menekan klip penahan ke arah luar.
2. Luruskan DIMM dengan soket sehingga takik pada DIMM sesuai dengan pembatas pada soket.



DIMM dikunci dengan kait sehingga hanya dapat dipasang ke satu arah. Agar DIMM tidak rusak, JANGAN masukkan DIMM ke dalam soket dengan paksa.

3. Pegang kedua ujung DIMM, lalu masukkan DIMM secara vertikal ke soket. Untuk memastikan DIMM terpasang dengan benar, dorong kedua ujung DIMM dengan kuat secara bersamaan hingga klip penahan terpasang pada tempatnya dan DIMM tidak dapat didorong lebih jauh lagi.

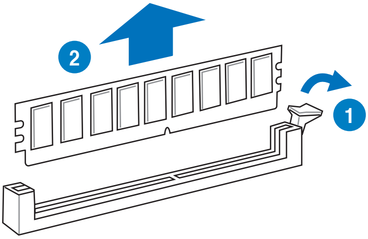


Selalu masukkan DIMM ke soket secara VERTIKAL agar kait DIMM tidak rusak.

- Untuk memasang dua atau lebih DIMM, lihat panduan pengguna yang diberikan dalam kemasan motherboard.
- Untuk daftar vendor resmi modul memori, lihat panduan pengguna.

Melepaskan DIMM dari soket DIMM satu klip

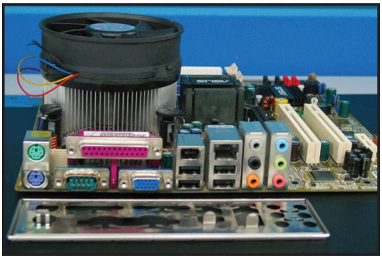
1. Tekan klip penahan ke arah luar untuk membuka penguncian DIMM.
2. Lepaskan DIMM dari soket.



Tahan DIMM dengan hati-hati menggunakan jari Anda saat menekan klip penahan. DIMM dapat rusak bila dilepaskan dengan tenaga yang berlebihan.

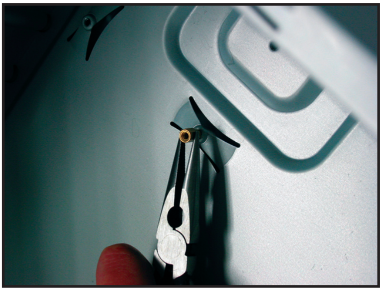
1.4 Memasang motherboard (papan induk)

1. I/O ports (port I/O) berbeda sesuai motherboard (papan induk). Gunakan dan pasang rear I/O shield (pelindung I/O belakang) yang hanya disertakan pada paket motherboard (papan induk) saja.

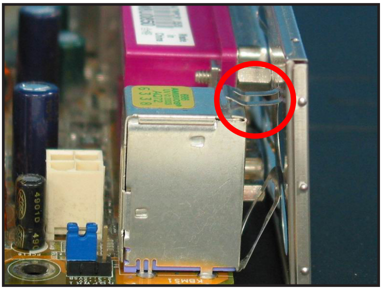


Beberapa tepi dan ujungnya yang tajam dapat menyebabkan luka fisik. Kami menyarankan Anda memakai sarung tangan tahan tusukan dan goresan sebelum memasang motherboard (papan induk) dan I/O shield (pelindung I/O).

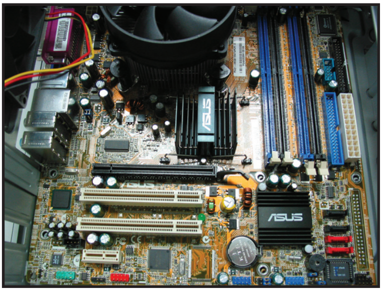
2. Pasangkan standoffs (pengunci) ke lubang sekrup yang sesuai pada metal plate (pelat logam).



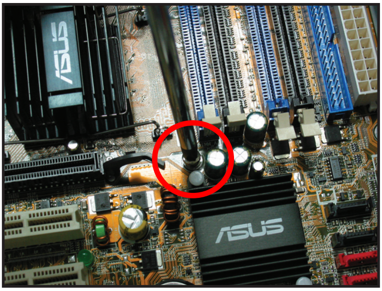
3. I/O shield edge springs (pembuka pelindung tepi I/O) dapat merusak I/O ports (port I/O). Berhati-hatilah saat memasang I/O shield (pelindung I/O).



4. Tempatkan I/O side of the motherboard (sisi I/O papan induk) ke arah belakang chassis (casis) dan tempatkan motherboard (papan induk) ke dalam chassis (casis).



5. Masukkan dan kencangkan setiap sekrup yang kendur pada rangkaian diagonal terlebih dahulu. Setelah semua sektrup dimasukkan, eratkan sekrup-sekrup tersebut hingga mereka benar-benar erat dan rapat.



- l Anda dapat melepaskan metal slot covers (pelindung slot logam) pada expansion cards (kartu ekspansi) di belakang chassis (casis) sebelum memasang motherboard (papan induk). Untuk beberapa model chassis (casis), mungkin sulit untuk melepaskannya expansion slot cover (penutup slot ekspansi) setelah pemasangan.
- JANGAN terlalu erat saat mengencangkan sekrup. Melakukannya dapat menyebabkan kerusakan pada motherboard (papan induk).

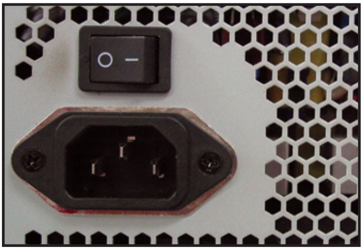
1.5 Memasang power supply unit (unit penyedia daya)

Terdapat dua jenis power supply units (unit penyedia daya) yang biasa digunakan. Yang satu adalah Active Power Factor Correction (PFC) (Koreksi Faktor Daya Aktif) dan yang lainnya adalah passive PFC (PFC pasif).

1. Pilihlah power supply unit (unit penyedia daya).

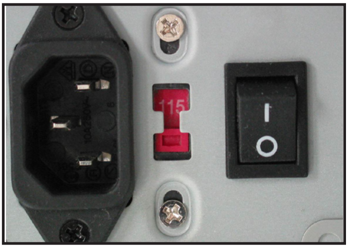
Power supply (Penyedia daya) dengan passive PFC (PFC pasif):

Passive PFC (PFC pasif) meminta pengguna untuk menyesuaikan secara manual AC input voltage (voltase masukan AC).

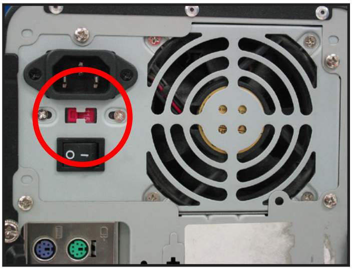


Power supply (Penyedia daya) dengan active PFC (PFC aktif):

Active PFC (PFC aktif) memperbaiki secara otomatis AC input voltage (voltase masukan AC).



2. Jika Anda menggunakan power supply (penyedia daya) dengan passive PFC (PFC pasif), sesuaikan untuk memperbaiki AC input voltage (voltase masukan AC) di area Anda.



Kegagalan menyesuaikan power supply (penyedia daya) untuk memperbaiki AC input voltage (voltase masukan AC) akan menyebabkan kerusakan serius pada sistem.

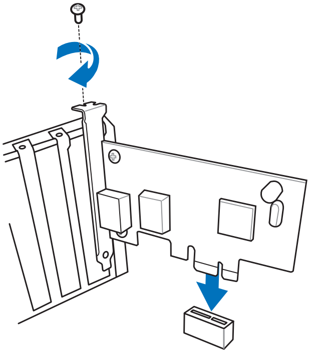
Gunakan hanya power supply units (unit penyedia daya) yang dilengkapi dengan sertifikat keselamatan saja.. Penggunaan unstable power supply units (unit penyedia daya yang tidak stabil) dapat merusak motherboard (papan induk) dan komponen-komponen lainnya. Lihatlah ke petunjuk pengguna untuk power supply units (unit penyedia daya) yang memenuhi persyaratan motherboard (papan induk).

1.6 Menginstal expansion card (kartu ekspansi)

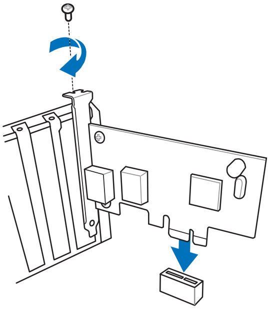
Menginstal expansion card (kartu ekspansi):

1. Lepaskan metal slot cover (penutup slot logam) yang berlawanan dengan expansion card slot (slot kartu ekspansi) tempat Anda ingin memasangkan expansion card (kartu ekspansi).
2. Pasanglah ekspansion card (kartu ekspansi) dan pastikan bahwa kartu tersebut terpasang dengan benar pada slot (slot).
3. Eratkan sekrup untuk mengunci kartu pada slot (slot).
4. Ulangi langkah sebelumnya untuk memasang expansion card (kartu ekspansi yang lain).

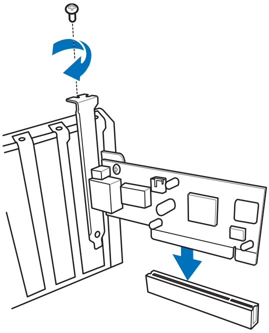
PCIE x16 card (Kartu PCIE x16)



PCIE x1 card (Kartu PCIE x1)



PCI card (Kartu PCI)

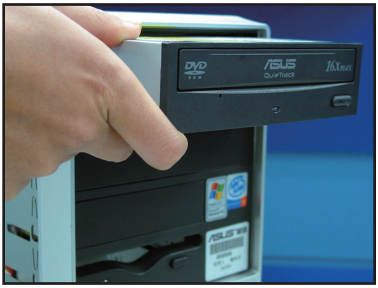


- Lihatlah ke dokumentasi kartu untuk petunjuk konfigurasi kartu lebih lanjut, dan pada motherboard user guide (petunjuk pengguna papan induk), apabila Anda perlu mengkonfigurasikan jumper (lompatan) apa pun setelah pemasangan expansion card (kartu ekspansi).
- Lihat ke motherboard user guide (petunjuk pengguna papan induk) untuk instruksi tentang sambungan expansion card signal cable (kabel sinyal kartu ekspansi).

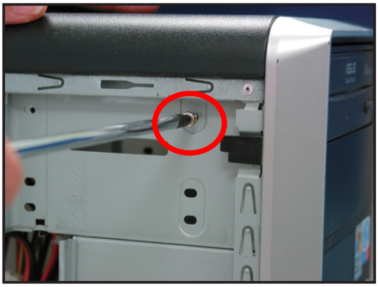
1.7 Memasang disk drives (penggerak keras)

1.7.1 PATA optical disk drive (Penggerak disk optik PATA)

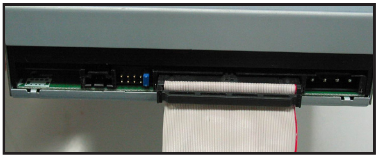
1. Lepaskan dummy cover (penutup muatan kosong) dan masukkan optical disk drive (penggerak disk optik) ke dalam bay (teluk).



2. Luruskan lubang sekrup dan kuncilah disk drive (penggerak disk) dengan sekrup.

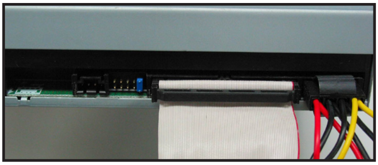


3. Orientasikan dan plug (masukkan) IDE cable (kabel IDE) ke dalam optical drive (penggerak optik). Red stripe (jalur merah) pada IDE cable (kabel IDE) adalah pin1 end (ujung belakang pin1) dan harus sesuai dengan tanda lekukan Pin1 pada optical disk drive (penggerak optik).

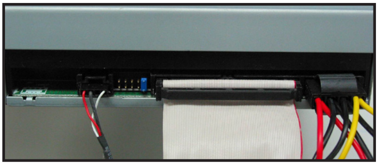


IDE cables (kabel IDE) merupakan dummy-proof (tanda muatan kosong). Jangan pernah memaksakan IDE cable (kabel IDE) ke dalam connector (konektor).

4. Sambungkan 4-pin power cable (kabel daya 4-pin) pada optical drive (penggerak optik).



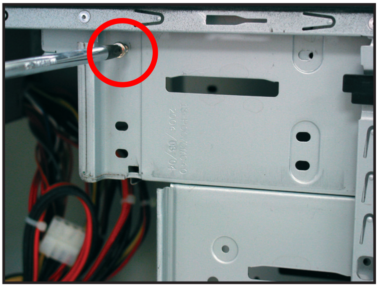
5. Pasangkan audio cable (kabel audio) dengan connector (konektor) pada optical drive (penggerak optik).



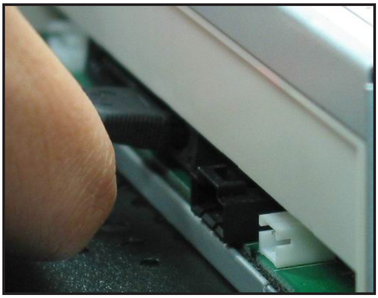
1.7.2 SATA optical disk drive (Penggerak disk optik SATA)

1. Lepaskan dummy cover (penutup muatan kosong) dan masukkan optical disk drive (penggerak disk optik) ke dalam bay (teluk).

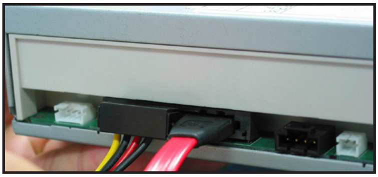
2. Luruskan lubang sekrup dan kuncilah disk drive (penggerak disk) dengan sekrup.



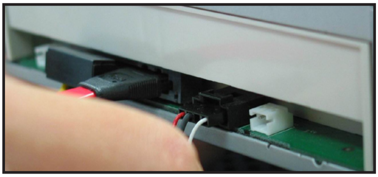
3. Orientasikan dan plug (masukkan) SATA cable (kabel SATA) ke dalam optical drive (penggerak optik). SATA cables (kabel SATA) merupakan dummy-proof (tanda muatan kosong). Jangan pernah memaksakan SATA cable (kabel SATA) ke dalam connector (konektor).



4. Sambungkan SATA power cable (kabel daya SATA) pada optical drive (penggerak optik).

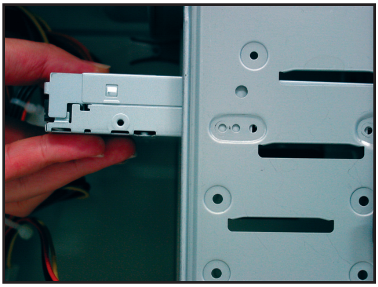


5. Pasangkan audio cable (kabel audio) dengan connector (konektor) pada optical drive (penggerak optik).

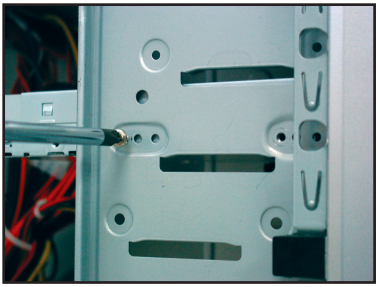


1.7.3 Floppy disk drive (Penggerak disk floppy)

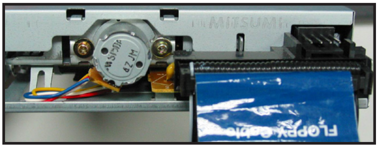
1. Lepaskan dummy cover (penutup muatan kosong) dan masukkan floppy disk drive (penggerak disk floppy) ke dalam bay (teluk).



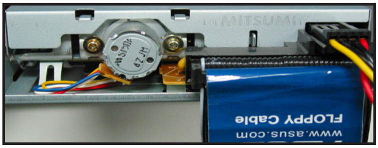
2. Luruskan lubang sekrup dan kuncilah disk drive (penggerak disk) dengan sekrup.



3. Orientasikan dan plug (masukkan) floppy interface cable (kabel antarmuka floppy) ke dalam floppy disk drive (penggerak disk floppy). Red stripe (jalur merah) pada kabel adalah pin1 end (ujung belakang pin1) dan harus sesuai dengan pin1 pada floppy disk drive (penggerak disk floppy).



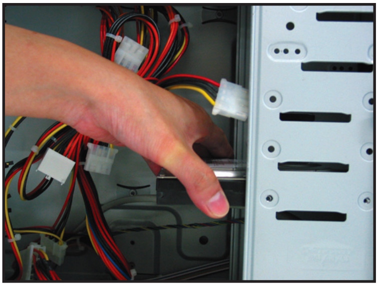
4. Sambungkan floppy power cable (kabel daya floppy) ke connector (konektor) di bagian belakang floppy disk drive (penggerak disk floppy).



Bahasa Indonesia

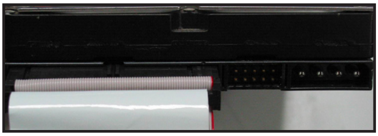
1.7.4 PATA hard disk drive (Penggerak disk keras PATA)

1. Masukkan PATA hard disk drive (penggerak disk keras PATA) ke dalam bay (teluk).

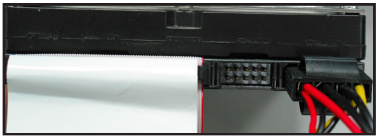


2. Luruskan lubang sekrup dan kuncilah disk drive (penggerak disk) dengan sekrup.

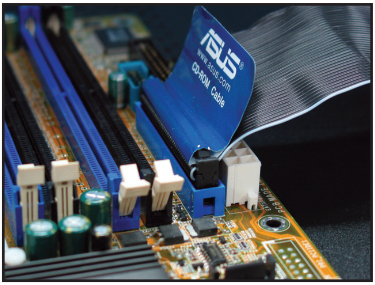
3. Sesuaikan dan sambungkan signal cable (kabel sinyal) pada hard disk drive (penggerak disk keras). Red stripe (jalur merah) pada kabel adalah pin1 end (ujung belakang pin1) Sesuaikan dummy-proof notch (posisi tanda muatan kosong) dan jangan masukkan cable (kabel) ke dalam connector (konektor).



4. Sambungkan 4-pin power cable (kabel daya 4-pin) ke connector (konektor) di bagian belakang hard disk drive (penggerak disk keras).

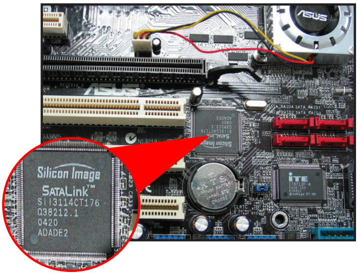


5. Pasangkan ujung lainnya dari signal cable (kabel sinyal) ke slot (slot) yang sesuai pada motherboard (papan induk).



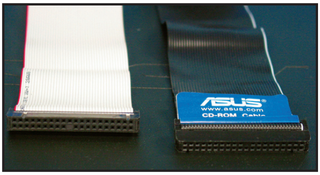
Catatan untuk memasang PATA hard disk drive (penggerak disk keras PATA).

- Jika operating system (sistem operasi Anda) dipasang ke hard disk drive (penggerak disk keras) yang dikendalikan oleh RAID atau pengendali-pengendali lainnya, Anda harus menginstal controller driver (penggerak kendali) pada hard disk (disk keras) terlebih dahulu.

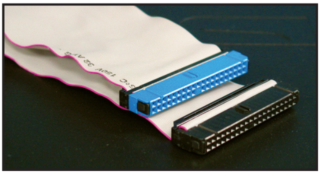


- Cable connector (konektor kabel) merupakan kode berwarna. Warna biru adalah untuk host connector (rumah konektor), dan warna hitam/abu-abu untuk primary/secondary disk drive (penggerak disk primer/sekunder).

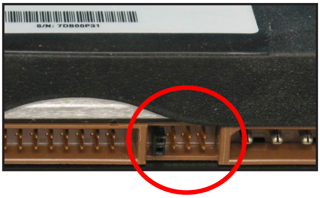
- Ada dua kabel untuk ATA IDE disk drives (penggerak disk ATA IDE), kabel yang terbaru 80-wire (right) (80-kawat (kanan)) dan kabel yang terlama 40-wire (left) (40-kawat (kiri)). Untuk ATA66/100/133 disk drives (penggerak disk ATA66/100/133), hanya 80-wire cable (kabel 80-kawat) yang dapat memberikan kinerja yang lebih baik. 40-wire cables (Kabel 40-kawat) biisanya untuk optical drives (penggerak optik).



- Cables (Kabel) tersebut didesain dengan pull tabs (tab tarik). Hanya dengan memasang disk drives (penggerak disk) dengan mudah berdasarkan pada cable labels (label kabel). Untuk mencegah kerusakan pins (pin), putuskan sambungan kabel dengan menarik cable tabs (tab kabel).

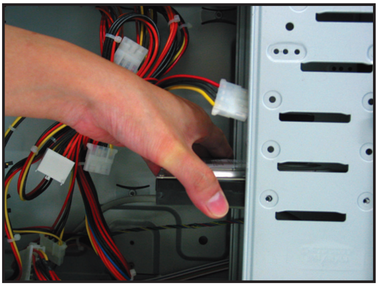


- Saat menyambungkan dua IDE devices (perangkat IDE), Anda harus mengatur jumpers (lompatan) ke posisi yang berbeda, yang satu berada di master (utama) dan yang satu berada di slave (cadangan). Jika Anda menggunakan 80-wire cable (kabel 80-kawat), Anda dapat menggunakan kabel yang memilih tipenya.

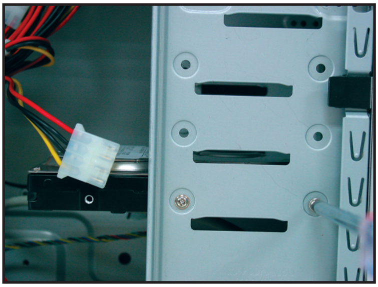


1.7.5 SATA hard disk drive (Penggerak disk keras SATA)

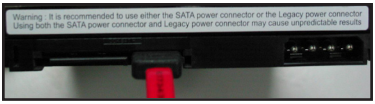
1. Masukkan SATA hard disk drive (penggerak disk keras SATA) ke dalam bay (teluk).



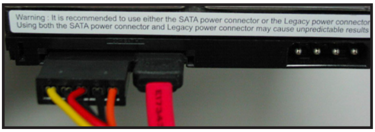
2. Luruskan lubang sekrup dan kuncilah disk drive (penggerak disk) dengan sekrup.



3. Sesuaikan dan sambungkan SATA cable (kabel SATA) pada hard disk drive (penggerak disk keras). Kabel hanya dapat sesuai dalam satu arah.

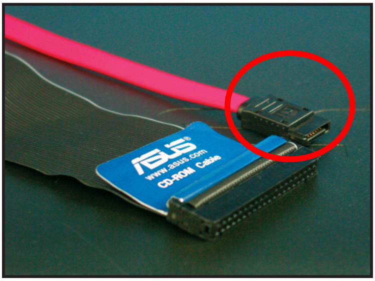

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

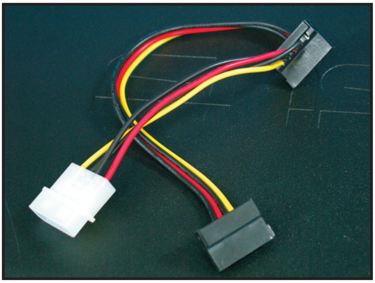
4. Sambungkan SATA power cable (kabel daya SATA) ke connector (konektor) di bagian belakang hard disk drive (penggerak disk keras).


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Catatan untuk memasang SATA hard disk drive (penggerak disk keras SATA)

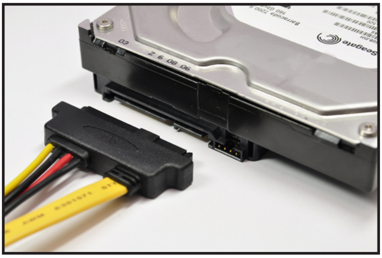
- Serial ATA (SATA) interface (antarmuka Serial ATA (SATA)) menyediakan data transmission speed (kecepatan transmisi data) yang lebih tinggi dan voltage tolerance (daya voltase) yang lebih baik. Desain kecil kabel SATA juga menyelesaikan masalah perkabelan dan memungkinkan udara mengalir lebih baik di dalam chassis (casis).
- SATA power cable connector (konektor kabel daya SATA) berbeda dari traditional 4-pin power connector (konektor daya 4-pin tradisional). ASUS motherboard (papan induk ASUS) disertakan bersama power adopter cables (kabel adaptor daya) untuk Anda apabila power supply unit (unit penyedia daya) tidak disertakan dengan new connector (konektor) baru ini.


ASUS
www.asus.com
CD-ROM Cable

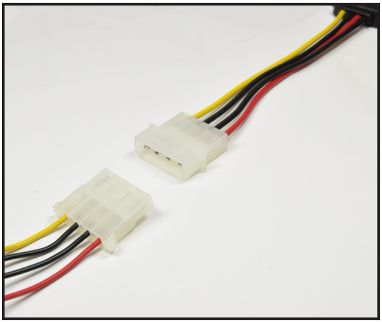


1.7.6 SAS hard disk drive (Penggerak disk keras SAS)

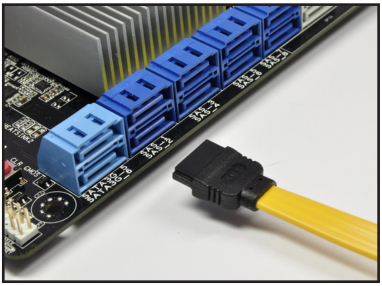
1. Sesuaikan dan sambungkan kabel kombinasi sinyal/daya SAS ke drive hard disk. Kabel hanya dapat sesuai dalam satu arah.



2. Sambungkan kabel daya SAS ke soket daya pada unit catu daya.



3. Sambungkan kabel sinyal SAS ke soket SAS pada motherboard.

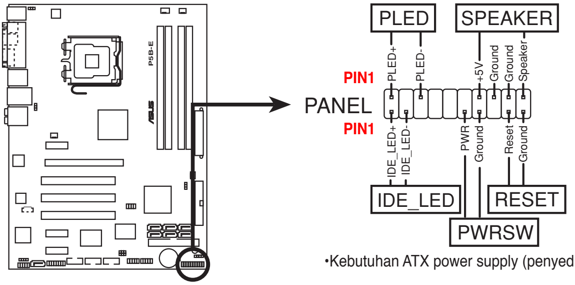

SAS_1
SAS_2
SAS_3
SAS_4
SAS_5
SAS_6
SATA3G_5
SATA3G_6
CLR_CMOS

1.8 Front panel cables (Kabel panel depan)

Menyambungkan front panel cables (kabel panel depan):

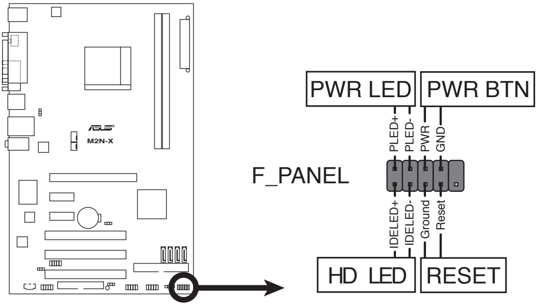
- RESET (TATA ULANG) (Reset Switch) (Tombol Tata Ulang)
- PLED (Power LED) (Daya LED)
- PWRSW (Power Switch) (Tombol Daya)
- IDE_LED (IDE Hard Disk Active LED) (LED Aktif Disk Keras IDE)
- SPEAKER (PENGERAS SUARA) (Speaker Connector) (Konektor Pengeras Suara)

20-8 pin front panel connector (konektor panel depan)


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
PIN1
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

•Kebutuhan ATX power supply (penyedia daya ATX).

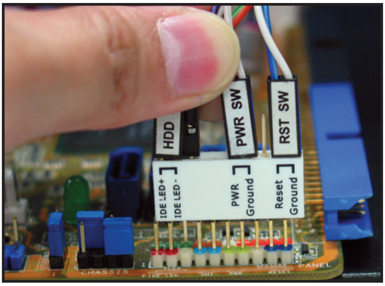
10-1 pin front panel connector (konektor panel depan)


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Front panel cables (kabel-kabel panel depan) dari chassis (casis) dapat berbeda sesuai model atau desainnya. Sambungkan connectors (konektor) ini ke motherboard (papan induk) sesuai dengan labelnya.
- Jika LED tidak menyala dan pin location (lokasi pin) sudah benar, Anda mungkin salah menempatkan ground pins (pin kabel bawah) dengan signal pins (pin sinyal). Biasanya white wire (kabel putih) menerima ground pins (pin kabel bawah) dan color-coded wire (kabel berkode-warna) untuk signal pins (pin sinyal).
- Front panel cables (kabel panel depan) SPEAKER (PENGERAS SUARA), RESET (TATA ULANG) dan PWRSW (TBLDY) tidak memiliki orientasi yang spesifik, saat kabel-kabel IDE_LED (IDE_LED) dan PLED (DLED) melakukannya. Sambungkan cable PIN1 (kabel PIN1) ke connector PIN1 (konektor PIN1) pada motherboard (papan induk).
- Front panel connector (konektor panel depan) bervariasi sesuai dengan model motherboard (papan induk), lihat ke petunjuk pengguna untuk informasi lebih lanjut.

ASUS Q-Connector (Konektor-Q ASUS)

Pemasangan satu langkah ASUS Q-Connector (Konektor-Q ASUS) akan menghemat waktu Anda dari kerumitan memasang front panel cables (kabel panel depan). Lihat ke petunjuk pengguna untuk lebih jelasnya.

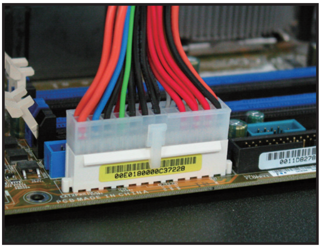


Q-connector (Konektor-Q) tersedia untuk model-model yang dipilih. Lihat ke petunjuk pengguna untuk lebih jelasnya.

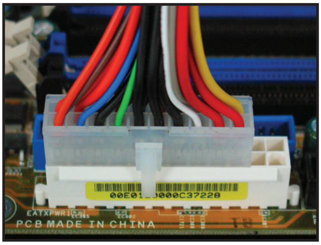
1.9 Menyambungkan ATX power (daya ATX)

ATX power connectors (konektor daya ATX) hanya dapat sesuai dalam satu orientasi saja. Gunakan side clip (klip sisi) untuk mengaitkan connector (konektor) ke motherboard (papan induk). JANGAN memaksakan male power connectors (konektor daya luar) ke dalam female counterparts (penompang dalam) pada motherboard (papan induk). Biasanya akan ada dua connectors (konektor) pada motherboard (papan induk), yaitu 24-pin and 4-pin power connectors (konektor daya 24-pin dan 4-pin). Beberapa power supply unit (unit penyedia daya) yang lama mungkin hanya memiliki 20-pin power connector (konektor daya 20-pin) yang juga sesuai dengan 24-pin power connector (konektor 24-pin) pada motherboard (papan induk).

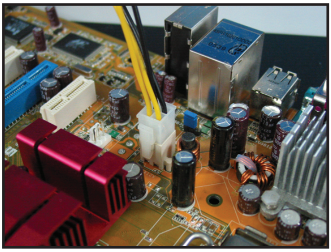
24-pin power connector (Konektor daya 24-pin)



20-pin power connector (Konektor daya 20-pin)
(pada 24-pin female counterpart (penompang dalam 24-pin))



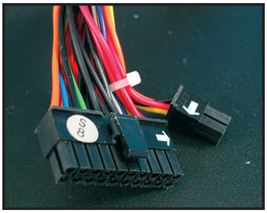
4-pin power connector (Konektor daya 4-pin)

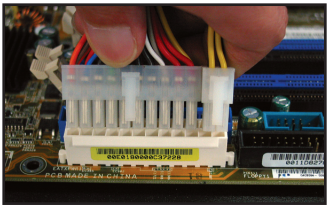


- JANGAN pasangkan external AC power (daya AC eksternal) saat menyambungkan power connectors (konektor daya) ke the motherboard (papan induk).

  Pastikan power connectors (konektor daya) benar-benar terkunci pada motherboard (papan induk).

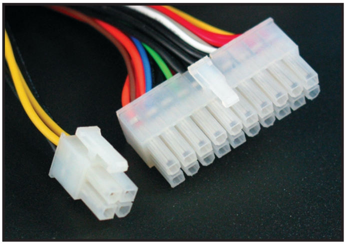
  Jikan power supply (penyedia daya) Anda mendukung 20-pin+4-pin, Anda dapat mengkombinasikan kedua connectors (konektor) ini dan memasang ke 24-pin connectors (konektor 24-pin) pada motherboard (papan induk).



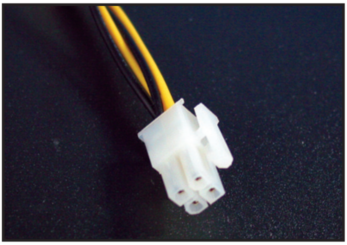


Power connector (Konektor daya)

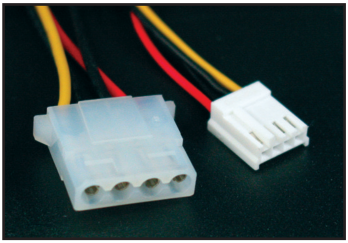
20+4 (24) pin ATX connector (Konektor ATX 20+4 (24) pin)



4-pin ATX connector (Konektor ATX 4-pin)

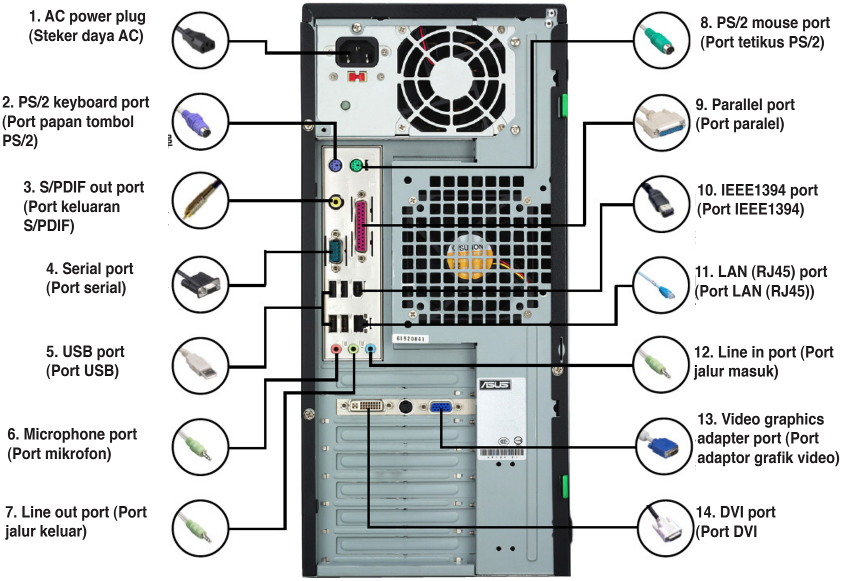


peripheral power connector (left) (konektor daya perangkat computer (kiri))
floppy power connector (right) (Konektor daya floppy (kanan))



1.10 Aksesoris dan perangkat komputer

Lihat pada gambar di bawah ini untuk menyambungkan aksesoris dan perangkat komputer.


1. AC power plug (Steker daya AC)
2. PS/2 keyboard port (Port papan tombol PS/2)
3. S/PDIF out port (Port keluaran S/PDIF)
4. Serial port (Port serial)
5. USB port (Port USB)
6. Microphone port (Port mikrofon)
7. Line out port (Port jalur keluar)
8. PS/2 mouse port (Port tetikus PS/2)
9. Parallel port (Port paralel)
10. IEEE1394 port (Port IEEE1394)
11. LAN (RJ45) port (Port LAN (RJ45))
12. Line in port (Port jalur masuk)
13. Video graphics adapter port (Port adaptor grafik video)
14. DVI port (Port DVI

1. AC Power plug (Steker Daya AC) + power extension cord (Kabel ekstensi daya)

2. PS/2 keyboard port (Port papan tombol PS/2) + keyboard (Papan tombol)

3. S/PDIF out port (Port keluaran S/PDIF) + digital 5.1 speaker system (Sistem pengeras suara digital 5.1)

4. Serial port (Port serial) + PDA dock (Dok PDA)

5. USB port (Port USB) + USB devices (Perangkat USB)

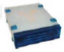
6. Microphone port (Port mikrofon) + microphone (Mikrofon)

7. Line out port (Port jalur keluar) + speaker (Pengeras suara)

8. PS/2 mouse port (Port tetikus PS/2) + mouse (Tetikus)

9. Parallel port (Port paralel) + printer (printer)

10. IEEE1394 port (Port IEEE1394) + external hard disk drive (penggerak disk keras eksternal)



11. LAN (RJ45) port (Port LAN (RJ45)) + modem (modem)

12. Line in port (Port jalur masuk) + recorder (Perekam)

13. VGA port (Port VGA) + CRT monitor (Monitor CRT)

14. DVI port (Port DVI) + LCD monitor (Monitor LCD)

Rear panel connectors (Konektor panel belakang) dapat bervariasi sesuai modelnya. Lihat ke petunjuk pengguna untuk lebih jelasnya.

1.11 Memulai untuk pertama kalinya

Sistem akan menjalankan power-on self tests (Pengujian Mandiri Daya Aktif) atau POST. Saat pengujian sedang jalan, BIOS beeps (nada beep BIOS) (lihat tabel kode-kode BIOS beep (nada beep BIOS) di bawah ini)

BIOS beeps (Nada beep BIOS)	Penjelasan
Satu nada beep panjang diikuti dengan tiga nada beep pendek	Tidak VGA yang terdeteksi
Satu nada beep panjang diikuti dengan dua nada beep pendek kemudian berhenti sebentar (berulang-ulang)	Tidak ada memory (memori) yang terdeteksi
Satu nada beep panjang diikuti dengan empat nada beep pendek	Kegagalan hardware component (komponen perangkat keras)(AMI BIOS)
Empat nada beep pendek	Kegagalan hardware component (komponen perangkat keras)(AWARD BIOS)

Troubleshooting (Pemecahan Masalah)

Masalah	Tindakan
• Tidak dapat menyalakan komputer. • Power LED (Daya LED) tidak bercahaya. • Power supply fan (Kipas penyedia daya) tidak bekerja.	Pastikan power cord (kabel daya) tersambung dengan benar.
Komputer menyala tetapi monitor tampak gelap.	• Pastikan monitor power (daya monitor) menyala dan VGA cable (kabel VGA) tersambung dengan benar. • Sesuaikan monitor brightness and contrast (kecerahan dan kontras monitor). • Shut down (nonaktifkan) komputer dan lepaskan power cord (kabel daya) Periksa apakah VGA card (kartu VGA dipasang dengan kuat).
Tidak ada memory (memori) yang terdeteksi.	• Pastikan memory module (modul memori) benar. • Pastikan DIMMS dipasang dengan kuat dan benar pada DIMMsocket (soket DIMM). • Pastikan memory module (modul memori) berasal dari daftar penjual resmi. Lihat ke petunjuk pengguna untuk QVL (Daftar Penjual Resmi).
Floppy Error (Floppy Rusak) (Indicator (Indikator) selalu menyala atau warning message (pesan peringatan) muncul pada layar.)	• Periksa konfigurasi BIOS tentang floppy disk drive (penggerak disk floppy). • Pastikan kabel-kabel pada floppy disk drive (penggerak disk floppy) dipasang dengan benar.
Hard/optical disk drive error (penggerak disk keras/optik rusak) (tidak dikenali atau terdeteksi)	• Pastikan jumper (pelontar) benar. (Master/Slave) (Utama/Cadangan) • Periksa konfigurasi BIOS tentang hard/optical diskdrive (penggerak disk optik/keras). • Pastikan device cables (kabel perangkat) dipasang dengan benar. • Pastikan device drivers (penggerak perangkat) terinstal pada komputer.

Bagian 2: Mengatur/memperbarui BIOS

2.1 AFUDOS utility (AFUDOS utility)

AFUDOS utility (AFUDOS utility) memungkinkan Anda memperbarui BIOS file (file BIOS) di dalam DOS environment (lingkungan DOS) menggunakan bootable floppy disk (disk floppy yang dapat mengaktifkan) dengan updated BIOS file (file BIOS) yang diperbarui. Utility (kegunaan) ini juga memungkinkan Anda menyalin current BIOS file (file current BIOS) yang dapat Anda gunakan sebagai backup (pencadangan) saat BIOS mengalami kegagalan atau mengalami perubahan selama proses pembaruan.

Menyalin current BIOS (current BIOS)

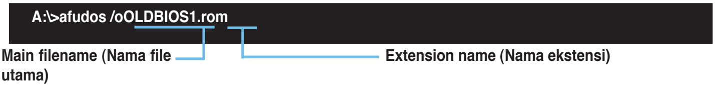
Menyalin current BIOS file (file current BIOS) menggunakan AFUDOS utility (AFUDOS utility):

- Pastikan floppy disk (disk floppy) tidak write-protected (terlindung dari penulisan) dan memiliki sedikitnya 1024KB ruang kosong untuk menyimpan file tersebut.
- Succeeding BIOS screens (layar BIOS berurutan) hanya merupakan referensi saja. Tampilan layar BIOS aktual mungkin tidak sama seperti yang ditunjukkan.

1. Salinlah AFUDOS utility (AFUDOS utility) (afudos.exe) dari DVD pendukung motherboard (papan induk) untuk bootable floppy disk (disk floppy yang dapat mengaktifkan) yang Anda buat sebelumnya.
2. Boot (aktifkan) sistemnya pada DOS mode (mode DOS), kemudian pada prompt (prompt) ketik:

   afudos /o[filename]

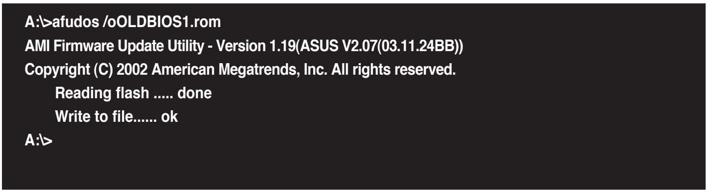
   Di mana [filename] (nama file) merupakan user-assigned filename (nama file pengguna yang ditugaskan) tidak lebih dari delapan karakter alfanumerik pada main filename (nama file utama) dan tiga karakter alfanumerik untuk extension name (nama ekstensi).



```
A:\>afudos /oOLDBIOS1.rom
```

Main filename (Nama file utama)
Extension name (Nama ekstensi)

3. Tekan <Enter> (Masuk). Utility (Kegunaan) menyalin current BIOS file (file current BIOS) ke floppy disk (disk floppy).



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
     Reading flash ..... done
     Write to file...... ok
A:\>
```

Utility (Kegunaan) kembali ke DOS prompt (prompt DOS) setelah menyalin current BIOS file (file current BIOS).

Memperbarui BIOS file (file BIOS)

Memperbarui BIOS file (file BIOS) menggunakan AFUDOS utility (AFUDOS utility):

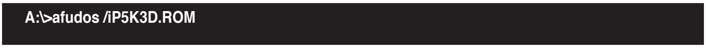
1. Kunjungi situs web ASUS (www.asus.com) dan download BIOS file (file BIOS) terbaru untuk motherboard (papan induk). Simpan BIOS file untuk bootable floppy disk (disk floppy yang dapat mengaktifkan).

Tulislah BIOS filename (nama file BIOS) pada selembar kertas. Anda perlu mengetik BIOS filename (nama file BIOS) dengan tepat pada DOS prompt (prompt DOS).

2. Salinlah AFUDOS utility (AFUDOS utility) (afudos.exe) dari DVD pendukung motherboard (papan induk) untuk bootable floppy disk (disk floppy yang dapat mengaktifkan) yang Anda buat sebelumnya.
3. Boot (aktifkan) sistemnya pada DOS mode (mode DOS), kemudian pada prompt (prompt) ketik:

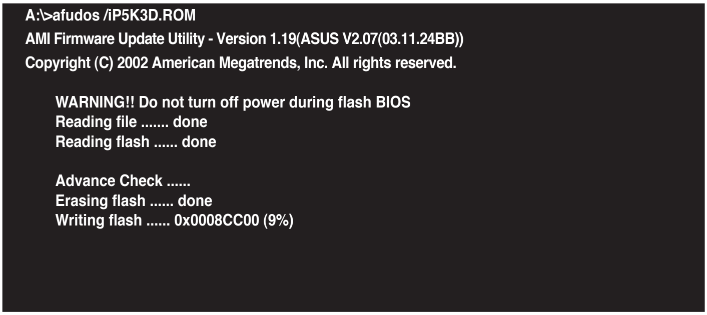
   afudos /o[filename]

   Di mana [filename] (nama file) adalah yang terbaru atau BIOS file (file BIOS) asli pada bootable floppy disk (disk floppy yang dapat diaktifkan).disk.



```
A:\>afudos /iP5K3D.ROM
```

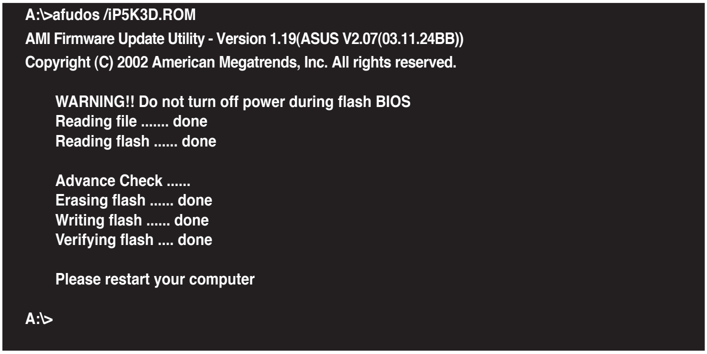
4. Utility (Kegunaan) memverifikasi file tersebut dan mulai memperbarui BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Tulislah BIOS filename (nama file BIOS) pada selembar kertas. Anda perlu mengetik BIOS filename (nama file BIOS) dengan tepat pada DOS prompt (prompt DOS).

5. Utility (Kegunaan) kembali ke DOS prompt (prompt DOS) setelah proses pembaruan BIOS selesai. Reboot (Aktifkan ulang) sistem dari hard disk drive (penggerak disk keras).



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 AwardBIOS Flash Utility (AwardBIOS Flash Utility)

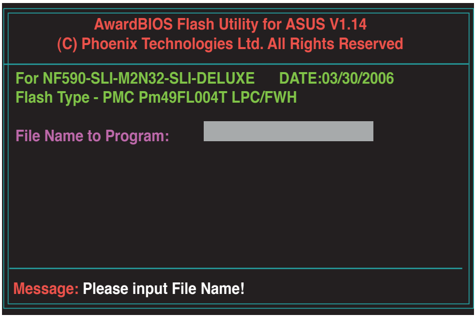
Memperbarui BIOS

Basic Input/Output System (BIOS) (Sistem Masukan/Keluaran Dasar) dapat diperbarui menggunakan AwardBIOS Flash Utility (AwardBIOS Flash Utility). Ikuti petunjuk-petunjuk ini untuk memperbarui BIOS menggunakan utility (kegunaan) ini.

1. Mendownload BIOS file (file BIOS) terbaru dari situs web ASUS. Rename (Ganti nama) file tersebut ke M2N32SLI.BIN dan simpan pada floppy disk (disk floppy), CD ROM atau USB flash disk (disk cepat USB) dalam **format FAT 16/12.**

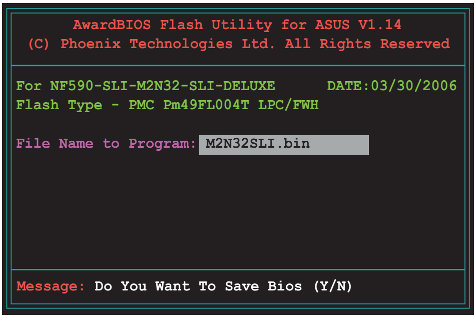
Simpan hanya BIOS file (file BIOS) terbaru di dalam disk untuk menghindari masuknya BIOS file (file BIOS) yang salah.

2. Salinlah AwardBIOS Flash Utility (AwardBIOS Flash Utility) (awdflash.exe) dari folder Software (Perangkat lunak) pada CD pendukung ke floppy disk (disk floppy), CD ROM atau USB flash disk (disk cepat USB) dengan BIOS file (file BIOS) terbaru.
3. Boot (Aktifkan) sistem di dalam DOS mode (mode DOS) menggunakan floppy disk (disk floppy), CD ROM atau USB flash disk (disk cepat USB) yang dpat diaktifkan yang Anda buat sebelumnya.
4. Di dalam DOS mode (mode DOS), gunakan <X:> (X merupakan nama dari disk assignment (penugasan disk)) untuk berpindah ke folder floppy disk (floppy disk), CD ROM atau USB flash disk (disk cepat USB) tempat Anda menyimpan BIOS file (file BIOS) dan AwardBIOS Flash Utility (AwardBIOS Flash Utility).
5. Pada prompt (prompt), ketik awdflash kemudian tekan <Enter> <Masuk>. Layar Award BIOS Flash Utility (Award BIOS Flash Utility) muncul.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

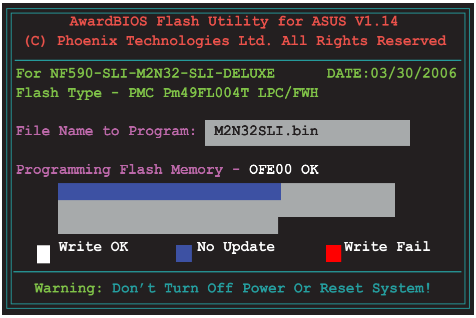
6. Ketik BIOS file nama (nama file BIOS) pada bidang File Name to Program (Nama File untuk Program), kemudian tekan <Enter> <Masuk>.



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Tekan <N> <Tidak> saat utility prompts (prompt kegunaan) menyimpan current BIOS file (file current BIOS). Layar berikut ini akan muncul.

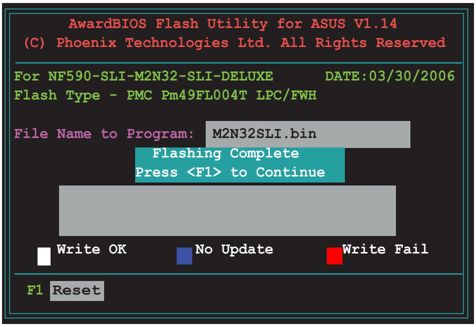
8. Utility (Kegunaan) memverifikasi BIOS file (file BIOS) di dalam floppy disk (flopy disk), CD ROM atau USB flash disk (disk cepat USB) dan mulai mengirimkan BIOS file (file BIOS).



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

JANGAN matikan atau reset (tata ulang) sistem selama proses pengiriman!

9. Utility (Kegunaan) menampilkan pesan Flashing Complete (Pengiriman Selesai) yang menunjukkan bahwa Anda telah berhasil mengirimkan BIOS file (file BIOS). Keluarkan disk tersebut kemudian tekan <F1> <F1> untuk restart



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin
                  Flashing Complete
                Press <F1> to Continue

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

 F1 Reset
```

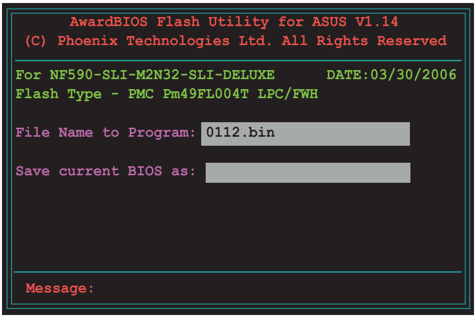
Menyimpan current BIOS file (file current BIOS).

Anda dapat menggunakan AwardBIOS Flash Utility (AwardBIOS Flash Utility) untuk menyimpan current BIOS file (file current BIOS). Anda dapat memproses current BIOS file (file current BIOS) saat BIOS file (file BIOS) mengalami perubahan selama proses pengiriman.

Pastikan floppy disk (floppy disk), CD ROM atau USB flash disk (disk cepat USB) memiliki cukup ruang disk untuk menyimpan file tersebut.

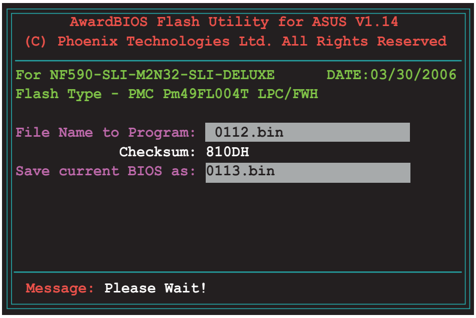
Menyimpan current BIOS file (file current BIOS) menggunakan AwardBIOS Flash Utility (AwardBIOS Flash Utility):

1. Ikuti langkah 1 hingga 6 dari bagian sebelumnya.
2. Tekan <Y> <Ya> saat utility prompts (prompt kegunaan) menyimpan current BIOS file (file current BIOS). Layar berikut ini akan muncul.



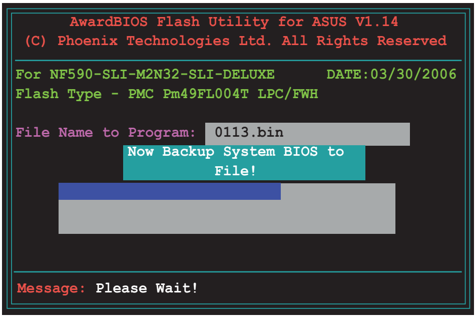
```
          AwardBIOS Flash Utility for ASUS V1.14
     (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Ketik filename (nama file) untuk current BIOS file (file current BIOS) di dalam bidang Save current BIOS as (Simpan current BIOS sebagai), kemudian tekan <Enter> <Masuk>.



```
          AwardBIOS Flash Utility for ASUS V1.14
     (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum:  810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. Utility (Kegunaan) menyimpan current BIOS file (file current BIOS) ke disk, kemudian kembali ke proses BIOS flashing (pengiriman BIOS).



```
          AwardBIOS Flash Utility for ASUS V1.14
     (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
             Now Backup System BIOS to
                       File!

Message: Please Wait!
```

2.3 ASUS Update utility (Kegunaan Pembaruan ASUS)

ASUS Update (Pembaruan ASUS) merupakan suatu kegunaan yang memungkin Anda untuk mengatur, menyimpan dan memperbaharui motherboard BIOS (BIOS papan induk) pada lingkungan Windows®. ASUS Update utility (Kegunaan Pembaruan ASUS) memungkinkan Anda untuk:

- Menyimpan current BIOS file (file current BIOS).
- Mendownload BIOS file (file BIOS) terbaru dari Internet.
- Memperbarui BIOS dari updated BIOS file (file BIOS terbaru).
- Memperbarui BIOS secara langsung dari Internet, dan
- Menampilkan informasi versi BIOS.

Kegunaan ini tersedia di dalam DVD pendukung yang disertakan dengan paket motherboard (papan induk).

ASUS Update (Pembaruan ASUS) memerlukan sambungan Internet baik melalui network (jaringan) atau Internet Service Provider (ISP) (Penyedia Layanan Internet).

Menginstal ASUS Update (Pembaruan ASUS)

Menginstal ASUS Update (Pembaruan ASUS):

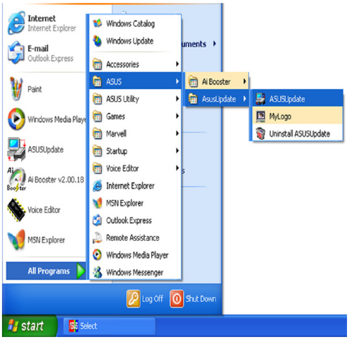
1. Letakkan DVD pendukung di dalam optical drive (penggerak optik). Drivers menu (Menu penggerak) muncul.
2. Dari menu Main (Utama), klik tab Utilities (Kegunaan), kemudian klik Install ASUS Update VX.XX.XX (Instal Pembaruan ASUS VX.XX.XX).
3. ASUS Update utility (Kegunaan Pembaruan ASUS) disalin pada sistem Anda.

Memperbarui BIOS melalui Internet

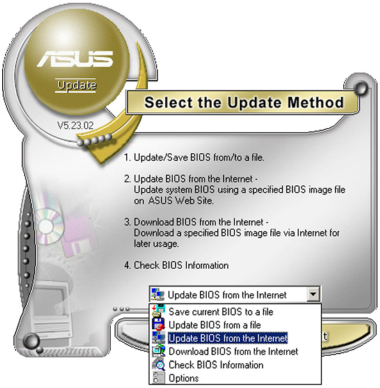
Matikan semua aplikasi Windows® sebelum Anda memperbarui BIOS menggunakan utility (kegunaan) ini.

Memperbarui BIOS melalui Internet:

1. Jalankan ASUS Update utility (kegunaan Update ASUS) dari Windows® desktop (dekstop Windows®)dengan mengklik **Start (Mulai) > Programs (Program) > ASUS (ASUS) > ASUSUpdate (Pembaruan ASUS) > ASUSUpdate (Pembaruan ASUS)**. Jendela utama ASUS Update (Pembaruan ASUS) muncul.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. Pilih **Update BIOS from the Internet** (Update BIOS dari Internet) dalam menu drop-down, lalu klik **Next** (Lanjut).



ASUS
Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.

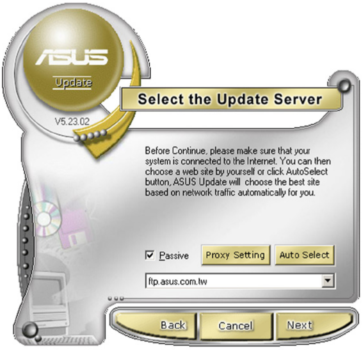
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Pilih situs ASUS FTP (FTP ASUS) yang terdekat untuk menghindari network traffic (lalu lintas jaringan), atau klik **Auto Select (Pilih Otomatis)**. Klik **Next (Selanjutnya).**



ASUS
Update
V5.23.02
Select the Update Server

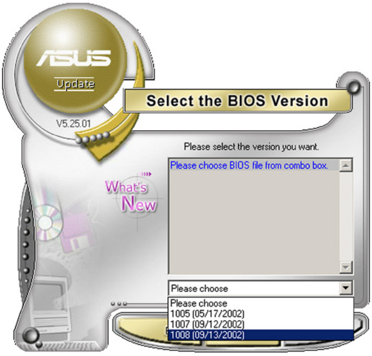
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. Dari situs FTP, pilih versi BIOS yang ingin Anda download. Klik **Next (Selanjutnya).**



ASUS
Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

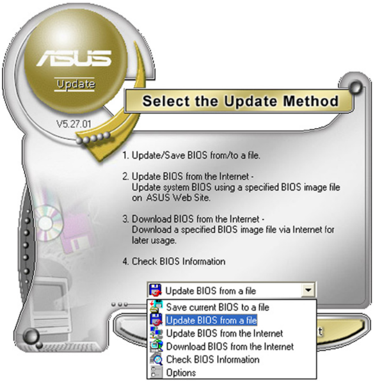
5. Ikuti petunjuk-petunjuk pada layar untuk menyelesaikan proses pembaruan.

ASUS Update utility (kegunaan Pembaruan ASUS) ini mampu memperbarui secara mandiri melalui Internet. Selalu perbarui utility (kegunaan) untuk memanfaatkan semua fitur-fiturnya.

Memperbarui BIOS melalui BIOS file (File BIOS)

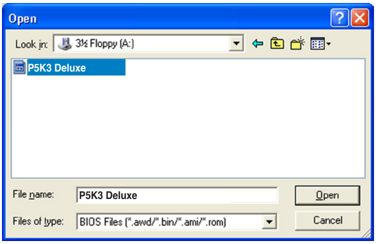
Memperbarui BIOS melalui BIOS file (File BIOS):

1. Jalankan ASUS Update utility (kegunaan Update ASUS) dari Windows® desktop (dekstop Windows®) dengan mengklik **Start (Mulai) > Programs (Program) > ASUS (ASUS) > ASUSUpdate (Pembaruan ASUS) > ASUSUpdate (Pembaruan ASUS).** Jendela utama ASUS Update (Pembaruan ASUS) muncul.
2. Pilih **Update BIOS from a file** (Perbarui BIOS dari file) di menu drop down, lalu klik **Next** (Lanjut).
3. Tempatkan BIOS file (file BIOS) dari Open window (jendela Buka), kemudian klik **Open (Buka)**.


ASUS
Update
V5.27.01
Select the Update Method
1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet -
Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet -
Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

4. Follow the screen instructions to complete the update process.


Open
P5K3 Deluxe
Open
Cancel
Look in: 3½ Floppy (A:)
File name: P5K3 Deluxe
Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Pastikan untuk memuat pengaturan default BIOS untuk memastikan kompatibilitas dan stabilisasi sistem. Pilih item **Load Setup Defaults** (Muat Konfigurasi Default) dalam menu **Exit** (Keluar).

2.4 ASUS BIOS Updater

ASUS BIOS Updater dapat digunakan untuk meng-update BIOS di lingkungan DOS. Utilitas ini juga memungkinkan Anda menyalin file BIOS aktif yang dapat digunakan sebagai cadangan saat BIOS gagal berfungsi atau rusak saat proses update berlangsung.

Layar utilitas pengganti hanya sebagai referensi. Tampilan layar utilitas sebenarnya dapat berbeda dari yang ditunjukkan.

Sebelum memperbarui BIOS

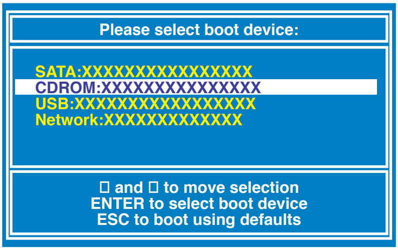
1. Sediakan DVD dukungan motherboard serta drive USB flash dalam format FAT32/16 dan satu partisi.
2. Download file BIOS terbaru dan BIOS Updater dari situs Web ASUS di http://support.asus.com, lalu simpan dalam drive USB flash.

- NTFS tidak didukung di lingkungan DOS. Jangan simpan file BIOS dan BIOS Updater ke drive hard disk atau drive USB flash dalam format NTFS.
- Jangan simpan file BIOS ke floppy disk karena kapasitas disk rendah.

3. Matikan komputer, lalu lepaskan semua drive hard disk SATA (opsional).

Melakukan boot pada sistem di lingkungan DOS

1. Masukkan drive USB flash berisi file BIOS terbaru dan BIOS Updater ke port USB.
2. Lakukan boot pada komputer. Bila Logo ASUS ditampilkan, tekan <F8> untuk menampilkan **BIOS Boot Device Select Menu (Menu Pilihan Perangkat Boot BIOS)**. Masukkan DVD dukungan ke drive optik, lalu pilih drive optik sebagai perangkat boot.

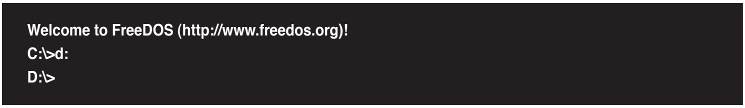


Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

□ and □ to move selection
ENTER to select boot device
ESC to boot using defaults

3. Bila menu **Make Disk (Buat Disk)** ditampilkan, pilih item **FreeDOS command prompt (Prompt perintah FreeDOS)** dengan menekan nomor item.
4. Pada prompt FreeDOS, ketik **d:,** lalu tekan <Enter> untuk mengalihkan disk dari Drive C (drive optik) ke Drive D (drive USB flash).



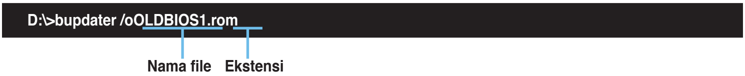
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Membuat cadangan BIOS aktif

Untuk membuat cadangan file BIOS aktif menggunakan BIOS Updater

Pastikan drive USB flash memiliki kapasitas kosong yang memadai untuk menyimpan file dan penulisannya tidak diproteksi.

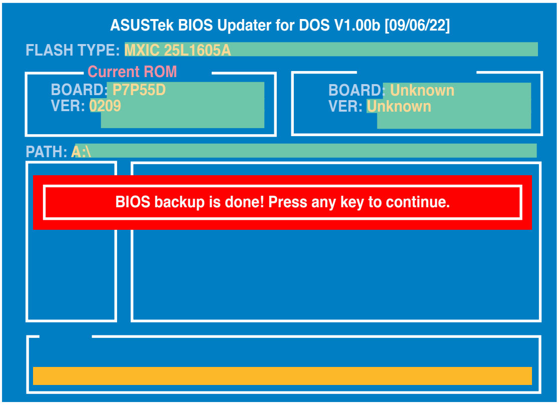
1. Pada prompt FreeDOS, ketik **bupdater /o[filename] (bupdater /o[nama file])**, lalu tekan <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

[filename] (Nama file) adalah nama file yang ditetapkan pengguna dan berisi maksimal delapan karakter alfanumerik untuk nama file utama dan tiga karakter alfanumerik untuk nama ekstensi.

2. Layar pencadangan BIOS Updater akan muncul untuk menunjukkan proses pencadangan BIOS. Setelah pencadangan BIOS selesai, tekan salah satu tombol untuk kembali ke prompt DOS.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM
BOARD: P7P55D                BOARD: Unknown
VER: 0209                    VER: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
```

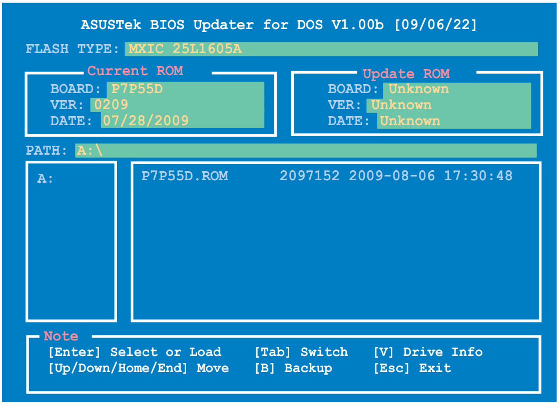
Meng-update file BIOS

Untuk meng-update file BIOS menggunakan BIOS Updater

1. Pada prompt FreeDOS, ketik **bupdater /pc /g**, lalu tekan <Enter>.

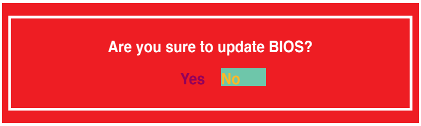
```
D:\>bupdater /pc /g
```

2. Layar BIOS Updater akan ditampilkan seperti di bawah ini.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
    Current ROM                     Update ROM
   BOARD: P7P55D                   BOARD: Unknown
   VER: 0209                       VER: Unknown
   DATE: 07/28/2009                DATE: Unknown
PATH: A:\
  A:          P7P55D.ROM      2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load    [Tab] Switch    [V] Drive Info
  [Up/Down/Home/End] Move   [B] Backup      [Esc] Exit
```

3. Tekan <Tab> untuk beralih di antara bidang layar, gunakan tombol <Up/Down/Home/End> (Atas/Bawah/Awal/Putus) untuk memilih file BIOS, lalu tekan <Enter>. BIOS Updater akan memeriksa file BIOS yang dipilih dan meminta Anda untuk mengkonfirmasikan update BIOS.



Are you sure to update BIOS?

4. Pilih **Yes (Ya)**, lalu tekan <Enter>. Setelah update BIOS selesai, tekan <ESC> untuk keluar dari BIOS Updater. Hidupkan ulang komputer.

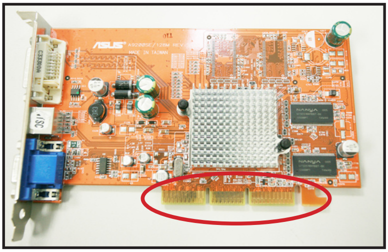
JANGAN matikan atau atur ulang sistem sewaktu meng-update BIOS agar proses boot sistem tidak gagal!

- Untuk BIOS Updater versi 1.04 atau yang lebih baru, utilitas akan secara otomatis keluar ke prompt DOS setelah meng-update BIOS.
- Pastikan untuk memuat pengaturan default BIOS agar kompatibilitas dan stabilitas sistem dapat dipastikan. Pilih item **Load Setup Defaults (Muat Default Konfigurasi)** dalam menu **Exit (Keluar)** BIOS. Untuk informasi rinci, lihat Bab 3 dalam panduan pengguna motherboard Anda.
- Jika Anda telah melepas semua drive hard disk SATA, pastikan untuk menyambungkannya setelah memperbarui file BIOS.

Bagian 3: Troubleshooting (Pemecahan Masalah)

3.1 Troubleshooting (Pemecahan Masalah) untuk Motherboard DIY (Papan induk DIY)

Setelah memasang komputer Anda sendiri, Anda mungkin menghadapi beberapa masalah saat memulainya. Bagian ini memberikan jawaban untuk beberapa pertanyaan umum mengenai komputer Anda sebelum memasuki operating system (sistem operasi). Bacalah bagian ini untuk basic troubleshooting (pemecahan masalah dasar). Ini akan menghemat waktu dan menghindari konflik saat Anda menghubungi tim pendukung teknisi ASUS atau mengembalikan produk untuk layanan jaminan.

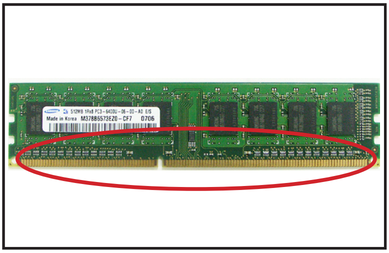


VGA card gold contact (kontak emas kartu VGA)

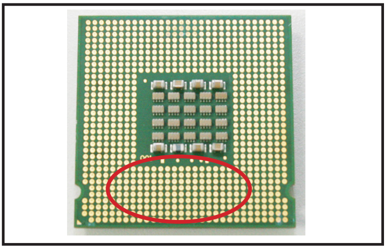
3.1.1 Basic troubleshooting (Pemecahan masalah dasar)

A. Sambungan buruk

1. Pastikan tidak ada kotoran pada gold contact (kontak emas) atau pins (pin).
2. Gunakan kapas pembersih atau penghapus dan bersihkan dengan lembut pada gold contact (kontak emas). Ingatlah untuk membuang serpihan kotoran.



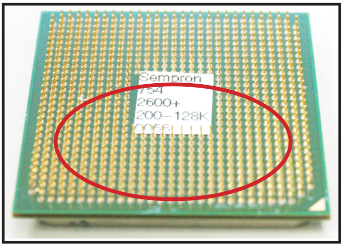
DIMM gold contact (Kontak emas DIMM)



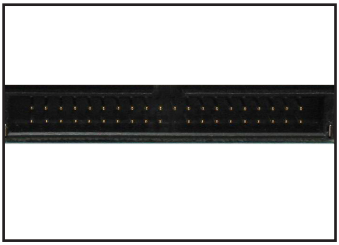
LGA775 processor gold contact points (titik kontak emas prosesor LGA775)

Peganglah kartu atau CPU pada tepinya dan JANGAN menyentuh gold contact (kontak emas). Static electricity (listrik statis) akan mengakibatkan perangkat rusak parah.

3. Pastikan tidak ada pin yang rusak atau bengkok pada connector pins (pin konektor) atau CPU pins (pin CPU). Pin yang rusak atau bengkok akan menyebabkan kegagalan pemakaian komponen tersebut. Hubungi penjual Anda untuk bantuan lebih lanjut.



AMD CPU gold pins (pin emas CPU AMD)

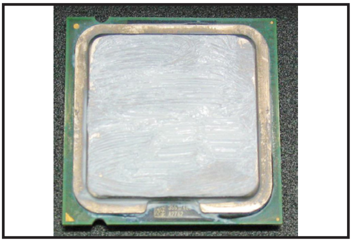


Connector pins (Pin konektor)

> Jika pin rusak atau bengkok disebabkan setelah pembelian, penjual Anda dapat meminta biaya perbaikan. Terkadang pin yang rusak atau bengkok TIDAK DAPAT DIPERBAIKI.

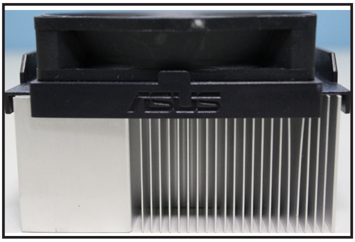
B. CPU overheated (Kelebihan panas pada CPU)

1. Bersihkan permukaan CPU dengan kain yang bersih. Teteskan beberapa thermal paste (pasta panas) untuk memperluas area CPU di mana heatsink (penurun panas) dapat terhubung. Pastikan bahwa pasta ini akan menyerap ke dalam bahkan pada lapisan tipis sekalipun.

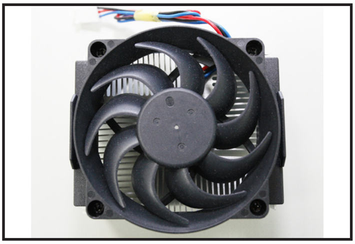


CPU surface (Permukaan CPU)

2. Pastikan tidak da kotoran pada heatsink (penurun panas) dan fan (kipas angin).



Tampilan samping pada heatsink (penurun panas) dan fan (kipas angin)



Tampilan atas pada heatsink (penurun panas) dan fan (kipas angin)

3. Ikuti petunjuk dari pabrik pembuat heatsink (penurun panas) dan fan (kipas angin) untuk membersihkan kotoran yang jatuh saat fan (kipas angin berputar).

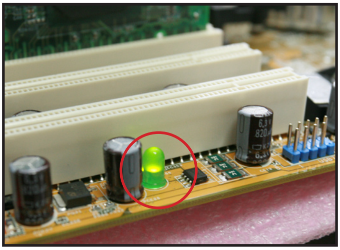
3.2 Permasalahan umum lainnya

- Saat melepaskan perangkat dari sistem, pastikan semua power cables (kabel daya) sudah dilepaskan.
- Semua error messages (pesan-pesan kesalahan) ditampilkan pada layar selama Power-On Self- Test (POST) (Pengujian Mandiri Daya Aktif).
- Jika terdapat BIOS beeps (nada beep BIOS), lihatlah ke bagian 1.11 untuk lebih jelasnya.
- Lihatlah ke tabel daftar periksa di bawah ini untuk pemeriksaan lebih lanjut.

	Pemeriksaan item					
	Power LED (Daya LED)	**Screen display (Tampilan Layar)**	**Heatsink and fan (Kipas angin dan Penurun panas)**	**BIOS beeps (Nada beep BIOS)**	**Error message (Pesan Kesalahan)**	**Halaman referensi**
No power (Tidak ada daya)	Nonaktif	Tidak Ada	Berhenti	Tidak Ada	Tidak Tersedia	3-4
No screen display (Tidak ada tampilan layar)	Aktif	Tidak Ada	Berhenti	Tidak Ada	Tidak Tersedia	3-5
	Aktif	Tidak Ada	Bekerja	Tidak Ada	Tidak Tersedia	3-5
	Aktif	Tidak Ada	Bekerja	Ya	Tidak Tersedia	3-5
Gagal masuk ke OS	Aktif	Ya	Bekerja	Ya	Ya	3-5
	Aktif	Ya	Bekerja	Tidak Ada	Ya	3-5
	Aktif	Ya	Bekerja	Tidak Ada	Tidak Ada	3-5

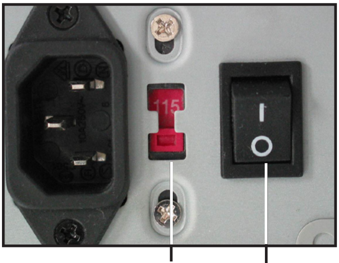
Apabila permasalahan telah diperbaiki tetapi permasalahan baru muncul, lihat kembali daftar periksa tersebut. Jika permasalahan masih tetap ada, hubungi penjual Anda atau tim pendukung teknis ASUS untuk bantuan lebih lanjut.

3.2.1 No power (Tidak ada daya)



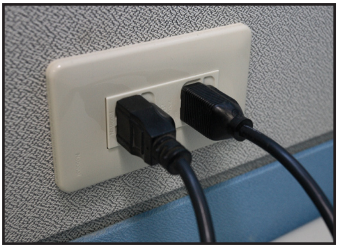
ASUS motherboards (papan induk ASUS) dilengkapi dengan power LED (daya LED) yang siaga. LED lights (Cahaya LED) menyala menunjukkan bahwa sistem sedang ON (AKTIF). Jika LED tetap tidak menyala, ikuti petunjuk di bawah ini untuk memperbaiki masalah tersebut.

1. Pastikan untuk menyesuaikan power supply (penyedia daya) untuk memperbaiki AC input voltage (voltase masukan AC) di area Anda, dan power supply (penyedia daya) diaktifkan.


115
AC input voltage switch (Tombol voltase masukan AC)
Power switch (Tombol daya) "—": On (Aktif); "O": Nonaktif

- Sebelum menyesuaikan AC input voltage (voltase masukan AC), pastikan untuk disconnect (memutuskan sambungan) power plug (steker daya). Kegagalan saat melakukannya akan menyebabkan kerusakan yang serius pada power supply unit (unit penyedia daya).
- Kegagalan menyesuaikan power supply (penyedia daya) untuk memperbaiki AC input voltage (voltase masukan AC) akan menyebabkan kerusakan serius pada sistem.

2. Pastikan power cord (kabel daya) terpasang pada wall outlet (stop kontak dinding)
   - Sambungkan power plug (steker daya) secara langung pada wall outlet (stop kontak dinding). JANGAN menyambungkannya pada power extension (ekstensi daya), uninterruptible power supply (UPS) (penyedia daya tanpa henti) atau perangkat lainnya.
   - Gantilah power plugs (steker daya) pada sistem dan monitor untuk memeriksa apakah wall outlet (stop kontak dinding) bekerja dengan normal.



3. Jika masalah masih tetap ada, Anda mungkin perlu menghubungi penjual Anda untuk mendapatkan power supply unit (unit penyedia daya) yang baru. Jika power supply unit (unit penyedia daya) berfungsi, hubungi penjual ASUS motherboard (papan induk ASUS) untuk layanan jaminan motherboard (papan induk).

3.2.2 Kegagalan boot-up (menyalakan komputer); Tidak ada screen display (tampilan layar).

Kebanyakan boot-up failure (kegagalan menyalakan komputer) dan tidak ada screen display (tampilan layar) merupakan hasil dari kecacatan perangkat atau pemasangan yang tidak benar.. Ikuti petunjuk di bawah ini untuk memperbaiki masalah tersebut.

1. Pastikan semua power cables (kabel daya) terpasang, termasuk sistem dan monitor.
2. Pastikan jika masalah timbul dari ekspansi perangkat.
    - Lepaskan semua expansion card (kartu ekspansi) dan perangkat-perangkatnya. Gunakan hanya motherboard (papan induk), monitor (monitor), VGA card (kartu VGA), memory modules (modul memori), power supply unit (unit penyedia daya), heatsink (penurun panas) dan fan (kipas angin), keyboard (papan tombol), dan mouse (tetikus) untuk reboot (menyalakan ulang) sistemnya.
    - Jika sistem bekerja dengan normal, ini merupakan salah satu expansion devices (perangkat ekspansi) yang menyebabkan masalah tersebut. Pasanglah ulang expansion devices (perangkat ekspansi) yang Anda lepaskan, kembali ke sistem satu demi satu dan mencari defective device (perangkat yang cacat).
3. Pastikan jika masalah timbul dari basic system devices (sistem dasar perangkat).
    - Jika Anda memiliki beberapa perangkat yang sama lainnya, Anda dapat mengganti perangkat tersebut untuk mencari tahu defective device (perangkat yang cacat) seperti “memory module (modul memori), CPU (CPU), motherboard (papan induk), hard/optical disk drive (penggerak disk keras/optik), keyboard (papan tombol)/mouse (tetikus).”

Saat Anda mencari tahu defective device (perangkat yang cacat), hubungi device retailer (penjual peranti Anda) untuk memperbaikinya.

3.2.3 Kegagalan masuk ke operating system (sistem operasi)

1. Jika masalah timbul setelah Anda menambahkan suatu hardware (perangkat keras). Lepaskan hardware (perangkat keras) yang baru ditambahkan dan reboot (nyalakan ulang) sistemnya. Jika sistem bekerja normal tanpa hardware (perangkat keras tersebut), perangkat tersebut mungkin cacat atau tidak sesuai dengan sistemnya. Hubungi penjual perangkat tersebut untuk meminta bantuan.
2. Jika permasalahan muncul setelah anda menginstal suatu software (perangkat lunak) atau driver (penggerak). Ikuti petunjuk di bawah ini untuk memperbaiki masalah tersebut.
    a. Masuk ke operating system (sistem operasi) pada safe mode (mode aman) dan hapuslah software (perangkat lunak) atau driver (penggerak) tersebut.
    b. Hubungi perusahaan operating system (sistem operasi) untuk bantuan lebih lanjut.
    c. Jika petunjuk sebelumnya gagal untuk memperbaiki masalah, Anda mungkin perlu memformat hard disk drive (penggerak disk keras) Anda dan menginstal ulang operating system (sistem operasi) yang baru.

3. Jika permasalahan timbul setelah Anda mengganti BIOS settings (pengaturan BIOS), reboot (nyalakan ulang) dan masuk ke BIOS untuk mengisi setup defaults (penataan standar). Lihat ke motherboard user guide (petunjuk pengguna papan induk) untuk lebih jelasnya.

4. Jika permasalahan timbul karena computer virus infection (infeksi virus komputer) atau files corruption (perubahan file-file), ikuti petunjuk di bawah ini untuk memperbaikinya.
    a. Masuklah ke operating system (sistem operasi) pada safe mode (mode aman) dan lakukan virus scan (pemindaian virus) pada sistem secara penuh menggunakan aplikasi anti-virus.
    b. Hubungi perusahaan operating system (sistem operasi) untuk bantuan lebih lanjut.
    c. Jika petunjuk sebelumnya gagal untuk memperbaiki masalah, Anda mungkin perlu memformat hard disk drive (penggerak disk keras) Anda dan menginstal ulang operating system (sistem operasi) yang baru.

3.2.4 FAQs (Pertanyaan Yang Sering Ditanyakan)

T1: Memory (memori) yang dilaporkan pada POST berbeda dengan memory (memori) yang dipasang.

J1: Memory (memori) yang dilaporkan berbeda dapat disebabkan dari pemasangan defective memory modules (modul memori cacat) atau DIMM yang tidak benar. Pastikan DIMM dalam kondisi baik dan DIMM dipasang dengan benar. Lihat ke motherboard user guide (petunjuk pengguna papan induk) untuk lebih jelasnya. Jika Anda memasang 4.0 GB memory (memori 4.0 GB) dan melaporkannya 3.X GB, ini masih normal.

T2. Sistem tidak dapat mendeteksi floppy disk drive (penggerak disk floppy), namun floopy disk (disk floppy) tetap bercahaya.

J2: Floopy disk cables (kabel disk floppy) terpasang dengan tidak benar. Pastikan red stripe (jalur merah) pada kabel (pin1 end) (ujung belakang pin1) dan harus sesuai dengan pin1 pada floppy disk drive (penggerak disk floppy).

T3: Gagal masuk ke operating system (sistem operasi) setelah USB flash disk (disk cepat USB) atau external hard disk drives (penggerak disk keras eksternal).

J3: Saat sistem mendeteksi USB flash disk (disk cepat USB) atau USB interface hard disks (disk keras antarmuka USB), ini dapat mengubah booting device priority (prioritas menyalakan ulang perangkat). Lepaskan USB devices (perangkat USB) dan restart (mulai ulang) sistemnya.

J4: Windows XP tidak meliputi RAID controller driver (penggerak pengendali RAID) sehingga hard disk drives (penggerak disk keras) tidak terdeteksi. Salinlah RAID controller driver (penggerak pengendai RAID) ke floppy disk (disk floppy) dan kemudian nyalakan ulang sistem dengan Windows XP disk (disk Windows XP), tekan <F6> untuk membaca driver (penggerak) dari floppy disk (disk floppy). Lihat ke motherboard user guide (petunjuk pengguna papan induk) untuk lebih jelasnya.

A4: Windows XP does not include the RAID controller driver so the hard disk drives are not detected. Copy the RAID controller driver to a floppy disk and when boot the system with the Windows XP disk, press <F6> to read the driver from the floppy disk. Refer to the motherboard user guide for details.

Bagian 4: Petunjuk perawatan komputer

4.1 Merawat komputer Anda dengan benar

Komputer pribadi Anda sama dengan peralatan rumah tangga lainnya. Jagalah komputer Anda dari kelembaban, matahari langsung dan static electricity source (sumber listrik statis). Anda tidak harus memindahkan komputer saat komputer dinyalakan kecuali sedang rusak. Debu-debu di dalam akan berpengaruh pada pengoperasian disk drive (penggerak disk) dan menambah masalah pemanasan yang akan mengakibatkan komputer rusak atau merusak komponen-komponennya.

4.2 Pengetahuan dasar

1. Tutuplah komputer Anda dengan pelindung debu saat tidak digunakan.
2. Saat menggunakan komputer Anda, jangan menaruh apa pun pada monitor untuk menutup lubang-lubang ventilasi. Panas yang berlebihan dapat menyebabkan kegagalan pemakaian pada monitor.
3. Jangan meletakkan komputer dekat dengan dinding dan berikan beberapa ruang untuk pelepasan panas. Panas yang berlebihan akan menyebabkan kerusakan pada sistem.
4. Letakkan komputer di permukaan yang stabil dan rata.
5. Jauhkan kompter dari area bersuhu panas. Suhu bekisar 5°C hingga 30°C adalah suhu yang terbaik untuk komputer. Gunakan air conditioner (pendingin ruangan) atau electric fan (kipas angin listrik) untuk menambah pengurangan panas lebih baik lagi.
6. Aturlah ribbon cables (jalur kabel) dengan rapi untuk menghindari aliran udara yang tidak memadai.

4.3 Pengetahuan penggunaan

1. Turn on (aktifkan) dan shut down (nonaktifkan) komputer Anda secara berkala. Jika komputer Anda perlu dinyalakan dalam jangka waktu yang lama, gunakan system/CPU fan (kipas angin sistem/CPU) dan high voltage power supply unit (unit penyedia daya voltase tinggi).
2. Power failure (kegagalan daya) yang tiba-tiba akan merusak hard disk drive (penggerak disk keras). Saat power supply (penyedia daya) tidak stabil, menambahkan uninterruptible power supply (penyedia daya tanpa henti) pada komputer Anda sangat disarankan.
3. Aturlah ulang data files (file-file data), lakukan virus scanning (pemindaian virus) dan virus codes renewal (pembaruan kode virus) serta defragment disk (penataan data disk) secara berkala.
4. Bersihkan komputer dari debu secara berkala. (Lepaskan semua power cords (kabel daya) sebelum membersihkan)
    - Lepaskan motherboad (papan induk) dan hard/optical disk drives (penggerak disk keras/optik), kemudian bersihkan mereka dengan air jernih atau sikat yang lembut.

    - Bersihkan debu dan kotoran pada power supply unit (unit penyedia daya) dengan antistatic vacuum (pembersih antistatis).

4.4 Petunjuk Cepat

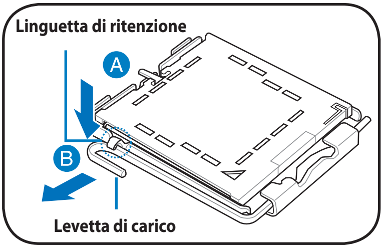
1. Jika komputer Anda tidak digunakan untuk jangka waktu yang lama, oleskan beberapa desiccant moisture absorbers (pelembab pengawet yang mudah menyerap) di dalam chassis (casis) untuk mencegah kerusakan akibat kelembaban.
2. Pada beberapa iklim area yang lembab dan panas, sebaiknya Anda menyalakan komputer setiap minggu. Ini juga akan mencegah kerusakan karena kelembaban.

Capitolo 1: Procedure Iniziali

1.1 Installazione del Processore

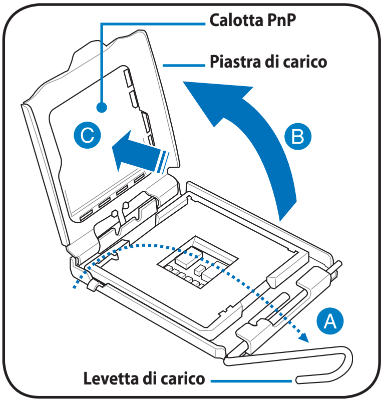
1.1.1 Socket Intel® LGA775

1. Individuare il socket della CPU sulla scheda madre.
2. Premere la levetta di carico con il pollice (A), quindi spostarla verso sinistra (B) finchè si libera dalla linguetta di ritenzione.

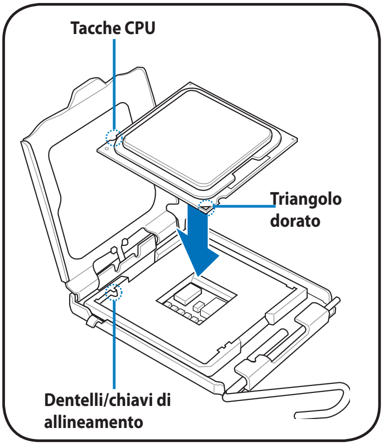

Linguetta di ritenzione
A
B
Levetta di carico

Per non danneggiare i pin del socket, non rimuovere la calotta PnP se non per installare il processore.

3. Alzare la levetta di carico in direzione della freccia, sino a formare un angolo di 135º.
4. Sollevare la piastra di carico con il pollice e l'indice sino a formare un angolo di 100º (4A), quindi premere la calotta PnP verso l'esterno, per rimuoverla dalla piastra di carico (4B).

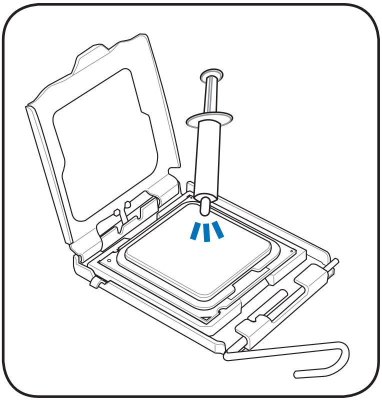

Calotta PnP
Piastra di carico
C
B
A
Levetta di carico

5. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull'angolo inferiore sinistro del socket, quindi far combaciare il dentello/chiave del socket con la tacca della CPU.



La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

6. Applicare della pasta termoconduttiva sulla superficie esposta della CPU che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.

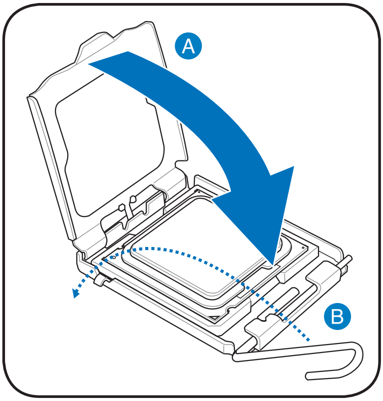


Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

Italiano

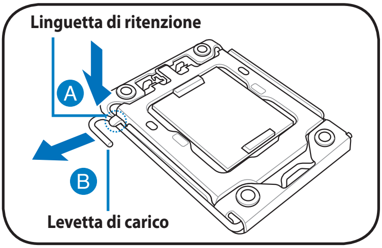
7. Chiudere la piastra di carico (A) e poi spingere verso il basso la levetta di carico (B) sino a quando non scatta nella linguetta di ritenzione.



1.1.2 Socket Intel® LGA1366

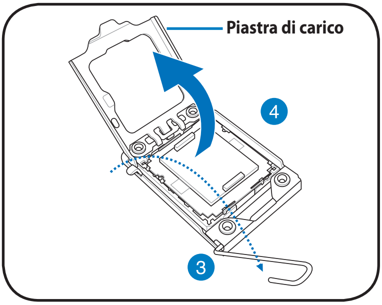
1. Individuare il socket della CPU sulla scheda madre.

2. Premere la levetta di carico con il pollice (A), quindi spostarla verso sinistra (B) finchè si libera dalla linguetta di ritenzione.

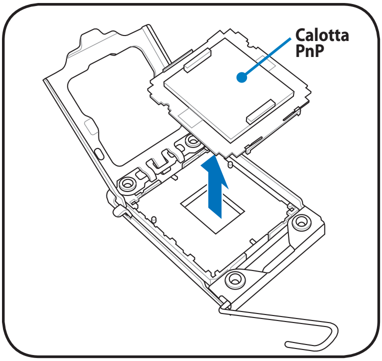

Linguetta di ritenzione
A
B
Levetta di carico

Per non danneggiare i pin del socket, non rimuovere la calotta PnP se non per installare il processore.

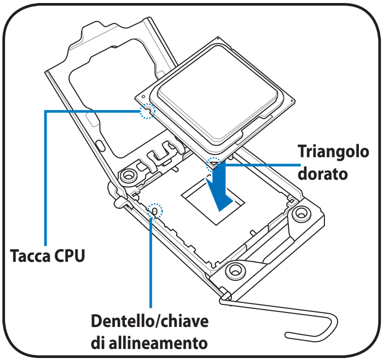
3. Alzare la levetta di carico in direzione della freccia, sino a formare un angolo di 135º.
4. Sollevare la piastra di carico con il pollice e l'indice sino a formare un angolo di 100º.


Piastra di carico
4
3

5. Rimuovere la calotta PnP dal socket della CPU.

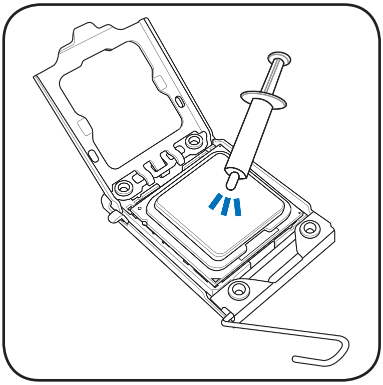

Calotta PnP

6. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull'angolo inferiore sinistro del socket, quindi far combaciare il dentello/chiave del socket con la tacca della CPU.



La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

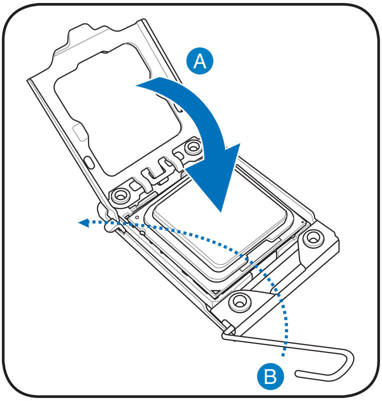
7. Applicare della pasta termoconduttiva sulla superficie esposta della CPU che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

8. Chiudere la piastra di carico (A) e poi spingere verso il basso la levetta di carico (B) sino a quando non scatta nella linguetta di ritenzione.

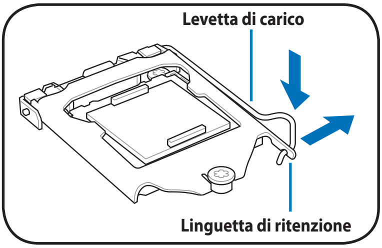


1.1.3 Socket Intel® LGA1156

Il processore LGA1155 è incompatibile con il socket LGA1156. NON installare un processore LGA1155 in un socket LGA1156.

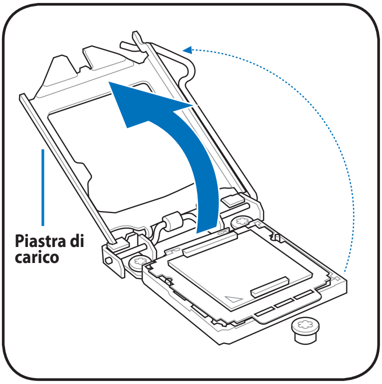
1. Individuare il socket della CPU sulla scheda madre.

2. Premere la levetta di carico con il pollice (A), quindi spostarla verso sinistra (B) finchè si libera dalla linguetta di ritenzione.

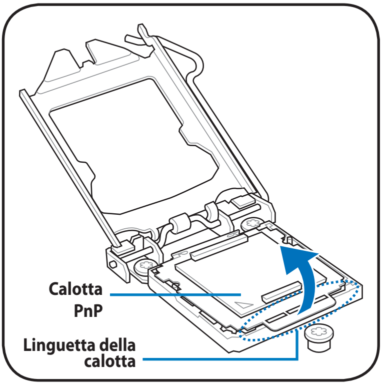

Levetta di carico
Linguetta di ritenzione

Per non danneggiare i pin del socket, non rimuovere la calotta PnP se non per installare il processore.

3. Alzare la levetta di carico in direzione della freccia, sino a quando la piastra di carico non è completamente sollevata.

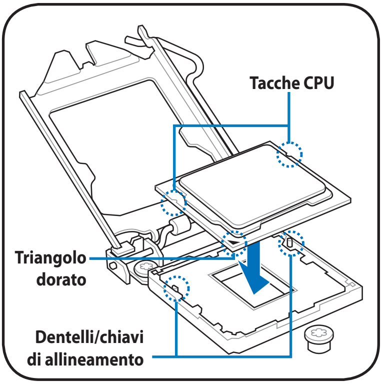

Piastra di carico

4. Rimuovere la calotta PnP dal socket della CPU.


Calotta PnP
Linguetta della calotta

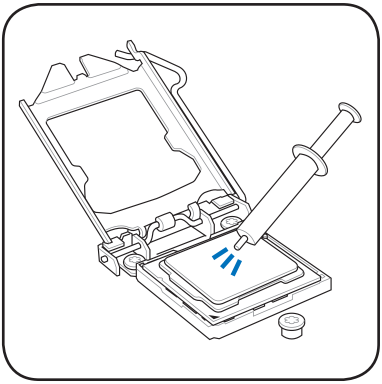
Italiano

5. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull’angolo inferiore sinistro del socket, quindi far combaciare i dentelli del socket con le tacche della CPU.



La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

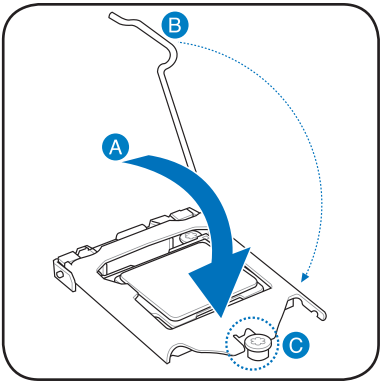
6. Applicare della pasta termoconduttiva sulla superficie esposta della CPU che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



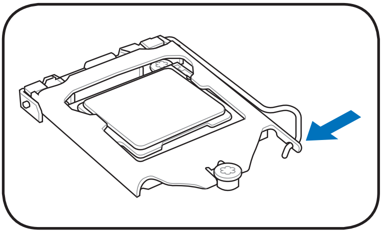
Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l’epidermide, lavare immediatamente e consultare personale medico specializzato.

7. Chiudere la piastra di carico (A), e poi spingere verso il basso la levetta di carico (B), assicurandosi che bordo anteriore della piastra di carico scivoli sotto il fermo di bloccaggio (C).



8. Inserire la levetta di carico nella linguetta di ritenzione.

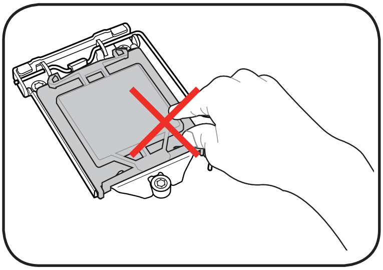


1.1.4 Socket Intel® LGA1155 (calotta PnP sulla piastra di carico)

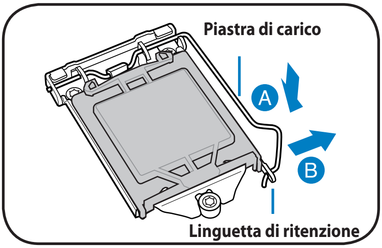
Il processore LGA1156 è incompatibile con il socket LGA1155. NON installare un processore LGA1156 in un socket LGA1155.

1. Individuare il socket della CPU sulla scheda madre.

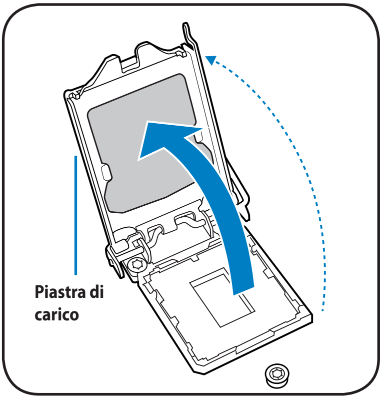
2. Non rimuovere la calotta PnP dal socket della CPU, prima dell'installazione della CPU.



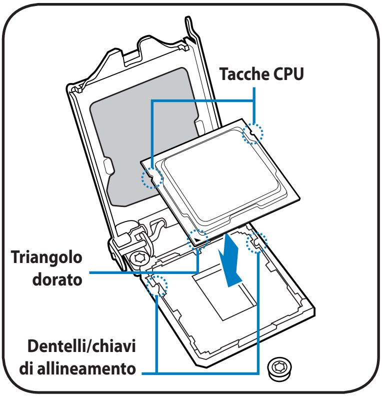
3. Premere la levetta di carico con il pollice (A), quindi spostarla verso destra (B) finchè si libera dalla linguetta di ritenzione.



4. Alzare la levetta di carico in direzione della freccia, sino a quando la piastra di carico non è completamente sollevata.



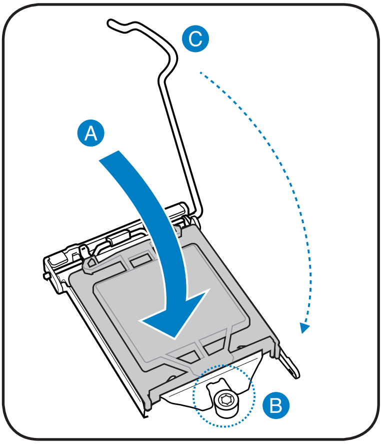
5. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull'angolo inferiore sinistro del socket, quindi far combaciare i dentelli del socket con le tacche della CPU.



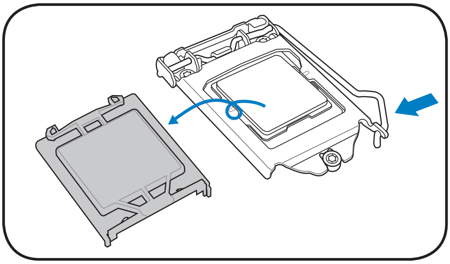
Tacche CPU
Triangolo dorato
Dentelli/chiavi di allineamento

La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

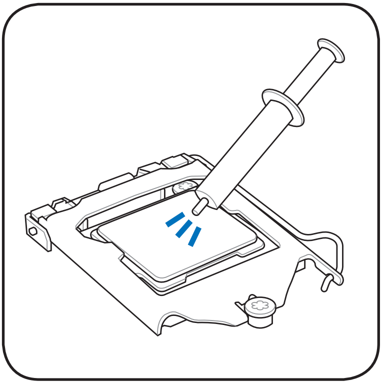
6. Chiudere la piastra di carico (A), assicurandosi che il profilo frontale della piastra di carico scivoli sotto il fermo di ritenzione (B). Quindi, spingere verso il basso la levetta di carico (C).



7. Per rimuovere la calotta PnP dal socket della CPU, inserire la levetta di carico sotto la linguetta di ritenzione.



8. Applicare della pasta termoconduttiva sulla superficie esposta della CPU, che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

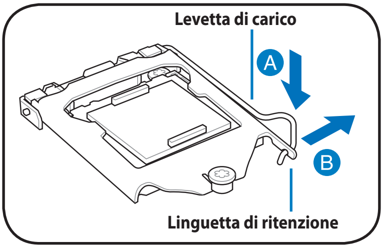
1.1.5 Socket Intel® LGA1155 (calotta PnP sotto la piastra di carico)

Il processore LGA1156 è incompatibile con il socket LGA1155. NON installare un processore LGA1156 in un socket LGA1155.

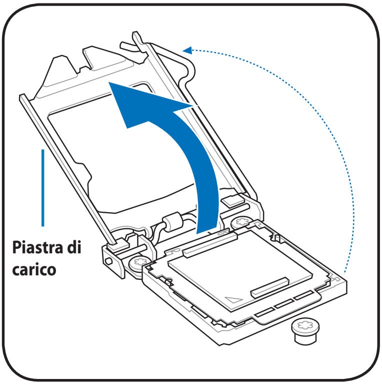
1. Individuare il socket della CPU sulla scheda madre.

2. Premere la levetta di carico con il pollice (A), quindi spostarla verso sinistra (B) finchè si libera dalla linguetta di ritenzione.

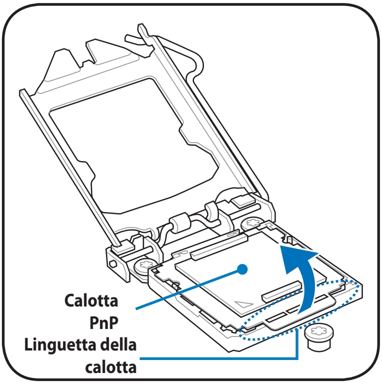
Per non danneggiare i pin del socket, non rimuovere la calotta PnP se non per installare il processore.


Levetta di carico
A
B
Linguetta di ritenzione

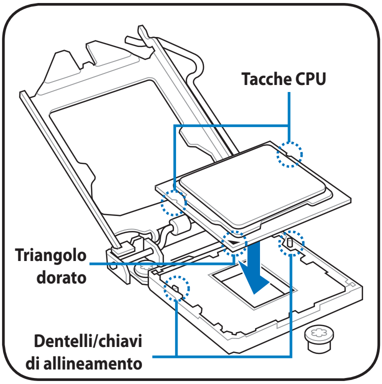
3. Alzare la levetta di carico in direzione della freccia, sino a quando la piastra di carico non è completamente sollevata.


Piastra di carico

4. Rimuovere la calotta PnP dal socket della CPU.

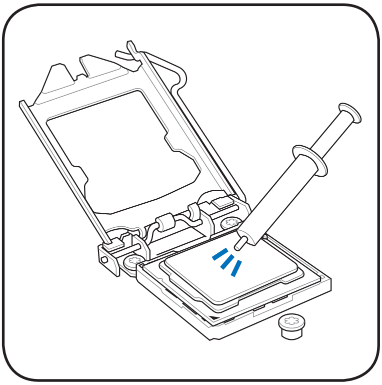

Calotta PnP
Linguetta della calotta

5. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull'angolo inferiore sinistro del socket, quindi far combaciare i dentelli del socket con le tacche della CPU.



La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

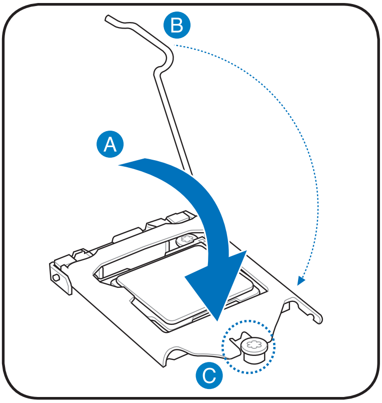
6. Applicare della pasta termoconduttiva sulla superficie esposta della CPU, che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



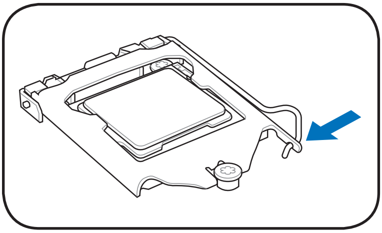
Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

7. Chiudere la piastra di carico (A), e poi spingere verso il basso la levetta di carico (B), assicurandosi che bordo anteriore della piastra di carico scivoli sotto il fermo di bloccaggio (C).

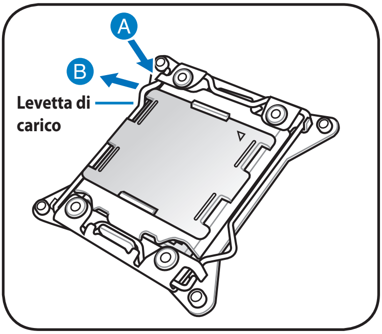


8. Inserire la levetta di carico nella linguetta di ritenzione.



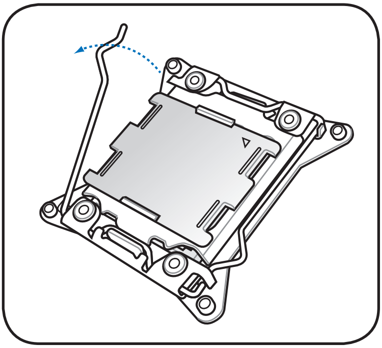
1.1.6 Socket Intel® LGA2011

1. Individuare il socket della CPU sulla scheda madre.
2. Premere la levetta di carico con il pollice (A), quindi spostarla verso sinistra (B) finchè si libera dalla linguetta di ritenzione.

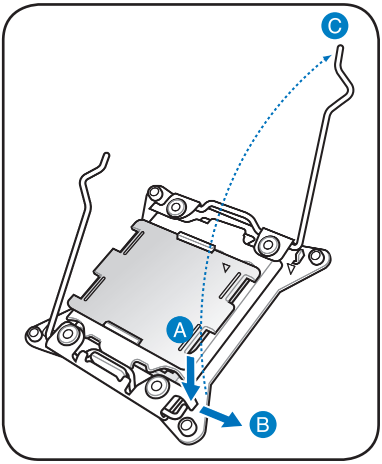


> Per non danneggiare i pin del socket, non rimuovere la calotta PnP se non per installare il processore.

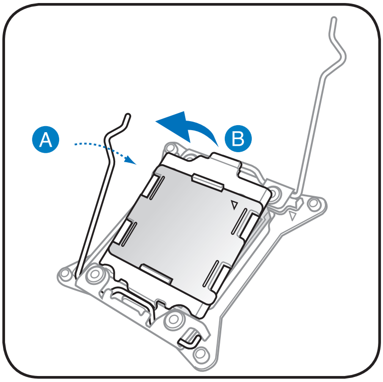
3. Sollevare leggermente la levetta di carico, in direzione della freccia.



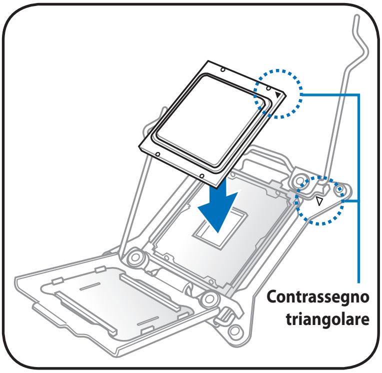
4. Premere la levetta di carico destra con il pollice (A), quindi spostarla verso destra (B), finchè si libera dalla linguetta di ritenzione. Sollevare la levetta di carico in the direzione della freccia (C).



5. Spingere la levetta di carico sinistra (A) per sollevare la piastra di carico (B).

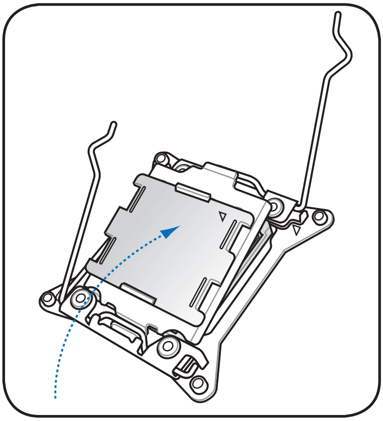


6. Posizionare il processore sul socket, assicurandosi che la contrassegno triangolare si trovi nell'angolo superiore destro del socket.

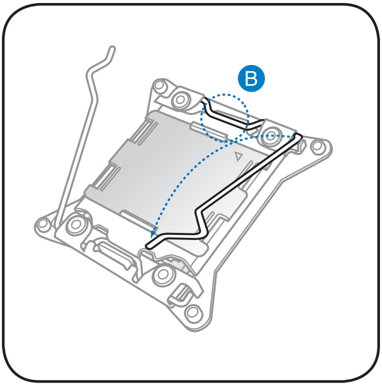


La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non essere danneggiata e non piegare i connettori!

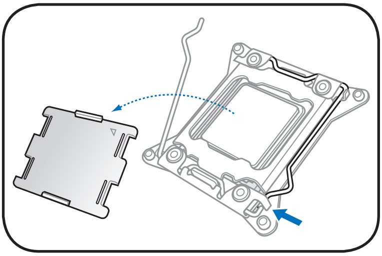
7. Chiudere la piastra di carico.



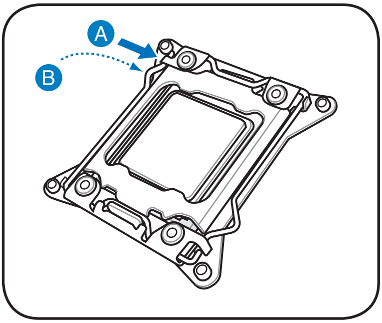
8. Spingere verso il basso la levetta di carico destra (A), assicurandosi che il profilo della piastra di carico sia fissato in posizione mediante la levetta (B).



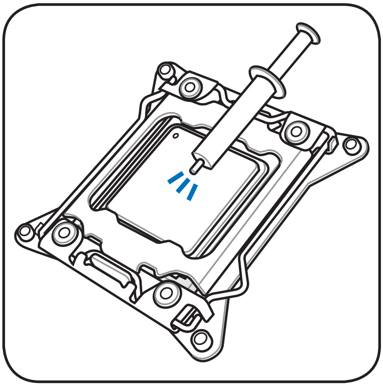
9. Inserire la levetta di carico destra sotto la linguetta di ritenzione. Rimuovere la calotta PnP dal socket del processore.



10. Spingere verso il basso la levetta di carico sinistra (A), quindi inserirla sotto la linguetta di ritenzione (B).



11. Applicare della pasta termoconduttiva sulla superficie esposta della CPU, che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.

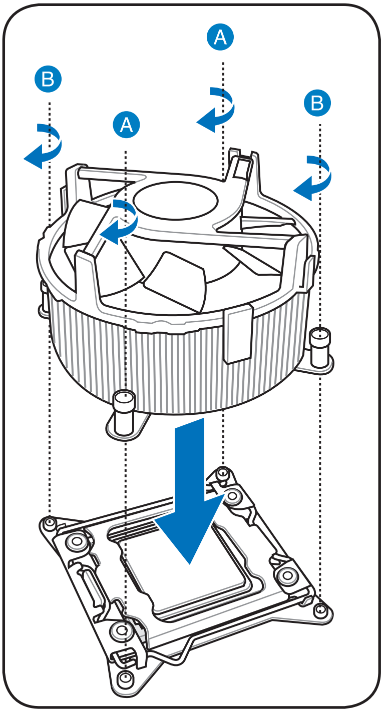


Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

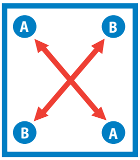
Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

12. Porre il dissipatore sul lato superiore del processore, installato in precedenza, assicurandosi che i quattro fermi di bloccaggio combacino con i fori sul socket del processore.

13. Inserire e avvitare ciascuna delle quattro viti con un cacciavite Philips (a croce), in modo che il dissipatore sia ben appoggiato sul socket del processore. Quindi, stringerle ad una ad una per fissare saldamente il dissipatore.



Stringere le viti idel dissipatore in sequenza diagonale.

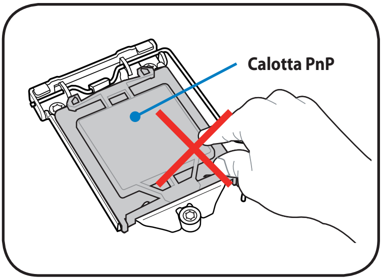


1.1.7 Socket Intel® LGA1150 (calotta PnP sulla piastra di carico)

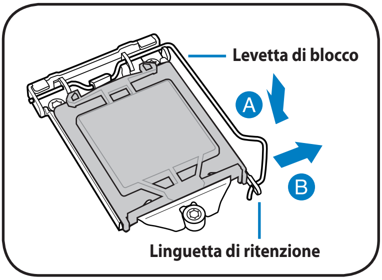
Assicurarsi di installare solo la CPU corretta prevista per il socket LGA1150. NON installare una CPU prevista per i socket LGA1155 e LGA1156 sul socket LGA1150.

1. Individuare il socket della CPU sulla scheda madre.

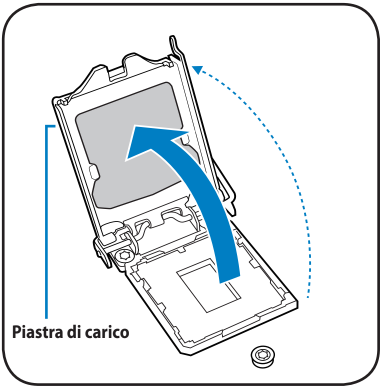
NON rimuovere ancora la calotta PnP dal socket CPU. Ciò potrebbe piegare i pin del socket. Fare riferimento all'illustrazione di seguito per la posizione della calotta PnP.



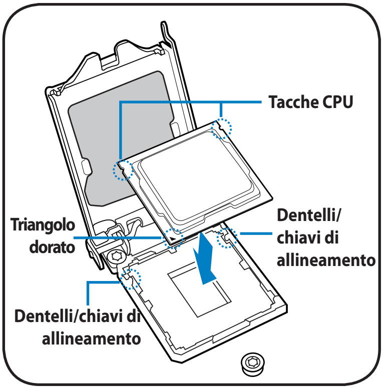
2. Premere la levetta di blocco con il pollice (A), quindi spostarla verso destra (B) finchè si libera dalla linguetta di ritenzione.



3. Alzare la levetta di blocco in direzione della freccia, sino a quando la piastra di carico non è completamente sollevata.



4. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull'angolo inferiore sinistro del socket, quindi inserire i denti della CPU sulle tacche di allineamento del socket.


Tacche CPU
Triangolo dorato
Dentelli/chiavi di allineamento
Dentelli/chiavi di allineamento

La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

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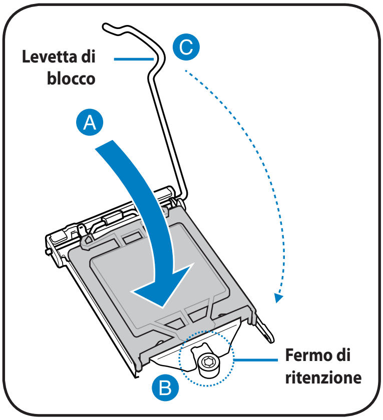
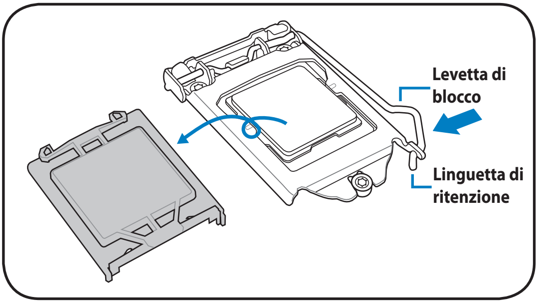
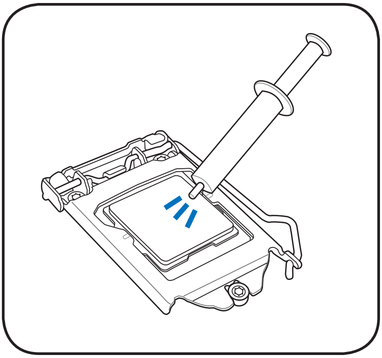
5. Chiudere la piastra di carico (A), assicurandosi che il profilo frontale della piastra di carico scivoli sotto il fermo di ritenzione (B). Quindi, spingere verso il basso la levetta di blocco (C).


Levetta di blocco
C
A
Fermo di ritenzione
B

6. Per rimuovere la calotta PnP dal socket della CPU, inserire la levetta di blocco sotto la linguetta di ritenzione.


Levetta di blocco
Linguetta di ritenzione

7. Applicare della pasta termoconduttiva sulla superficie esposta della CPU, che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



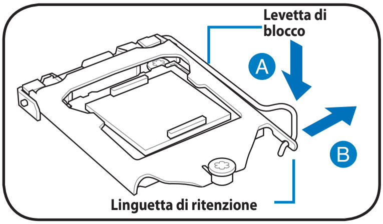
Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

1.1.8 Socket Intel® LGA1150 (calotta PnP sotto la piastra di carico)

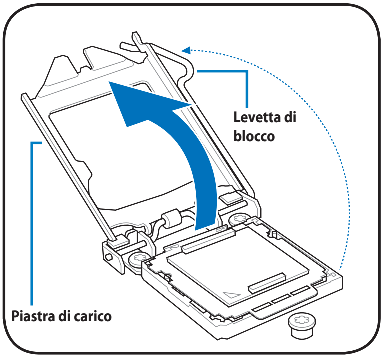
Assicurarsi di installare solo la CPU corretta prevista per il socket LGA1150. NON installare una CPU prevista per i socket LGA1155 e LGA1156 sul socket LGA1150.

1. Individuare il socket della CPU sulla scheda madre.
2. Premere la levetta di blocco con il pollice (A), quindi spostarla verso sinistra (B) finchè si libera dalla linguetta di ritenzione.

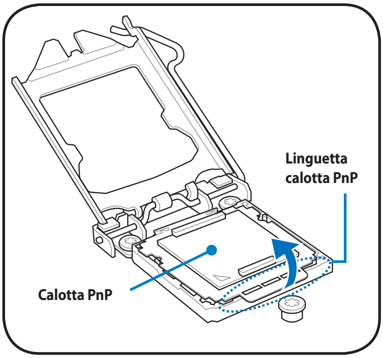

Levetta di blocco
A
B
Linguetta di ritenzione

NON rimuovere ancora la calotta PnP dal socket CPU. Ciò potrebbe piegare i pin del socket.

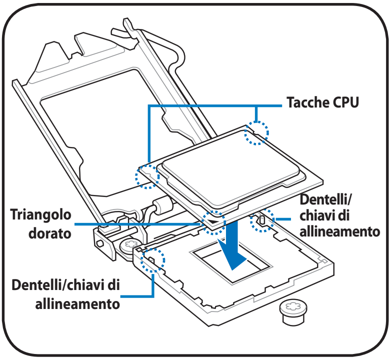
3. Alzare la levetta di blocco in direzione della freccia, sino a quando la piastra di carico non è completamente sollevata.


Levetta di blocco
Piastra di carico

4. Rimuovere la calotta PnP dal socket della CPU.

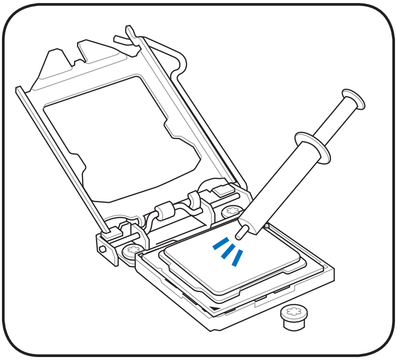

Linguetta calotta PnP
Calotta PnP

5. Posizionare la CPU sul socket, assicurandosi che il triangolo dorato sia sull'angolo inferiore sinistro del socket, quindi inserire i denti della CPU sulle tacche di allineamento del socket.


Tacche CPU
Triangolo dorato
Dentelli/ chiavi di allineamento
Dentelli/chiavi di allineamento

La CPU può essere inserita in una sola direzione e NON deve essere forzata nel socket per non piegare i connettori!

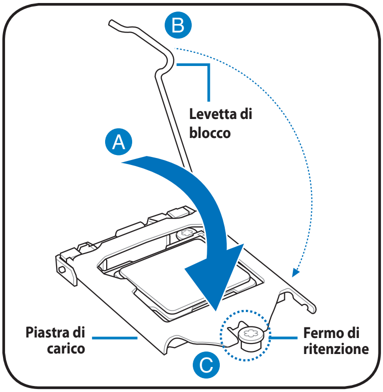
6. Applicare della pasta termoconduttiva sulla superficie esposta della CPU, che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



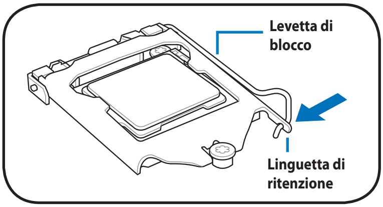
Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

7. Chiudere la piastra di carico (A), e poi spingere verso il basso la levetta di blocco (B), assicurandosi che bordo anteriore della piastra di carico scivoli sotto il fermo di ritenzione (C).


B
Levetta di blocco
A
Piastra di carico
C
Fermo di ritenzione

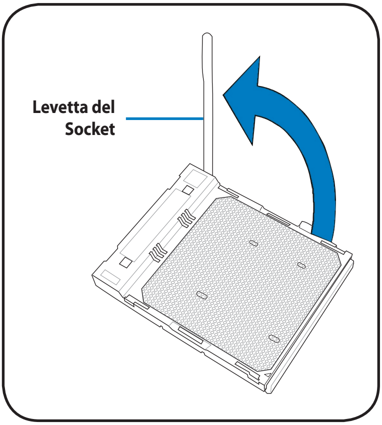
8. Inserire la levetta di carico nella linguetta di ritenzione.


Levetta di blocco
Linguetta di ritenzione

1.1.9 Socket AMD AM2 / AM2+ / AM3

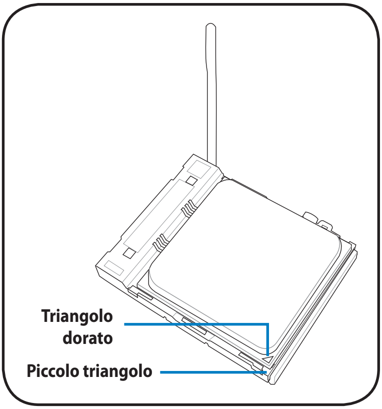
- I socket AMD AM2 e AM2+ sono compatibili con i processori AMD AM2, AM2+ e AM3.
- Il socket AMD AM3 è compatibile soltanto con processori AMD AM3. NON installare un processore AMD AM2+ / AM2 su un socket AM3.

1. Individuare il socket della CPU sulla scheda madre.
2. Sbloccare il socket premendo la levetta di lato, quindi sollevarla di un angolo di 90º.



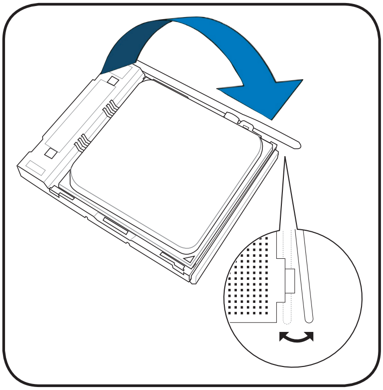
Assicurarsi che la levetta del socket sia sollevata di 90°, altrimenti la CPU non potrà essere inserita completamente.

3. Posizionare la CPU sul socket in modo che l'angolo della CPU con il triangolo dorato corrisponda all'angolo del socket con un piccolo triangolo.
4. Inserire con attenzione la CPU all'interno del socket fino a bloccarla in posizione.

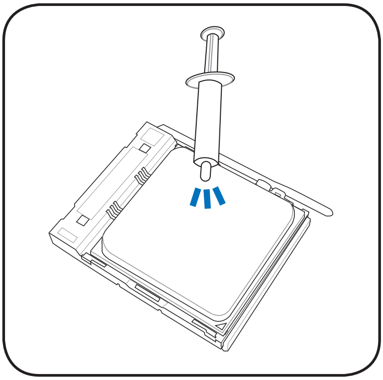


Italiano

5. Posizionata la CPU, spingere verso il basso la levetta del socket per fissare la CPU. La levetta si fissa lateralmente con uno scatto.



6. Applicare della pasta termoconduttiva sulla superficie esposta della CPU che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

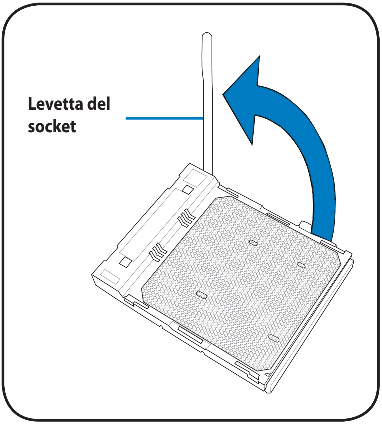
Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

1.1.10 Socket AMD AM2 / AM2+ / AM3

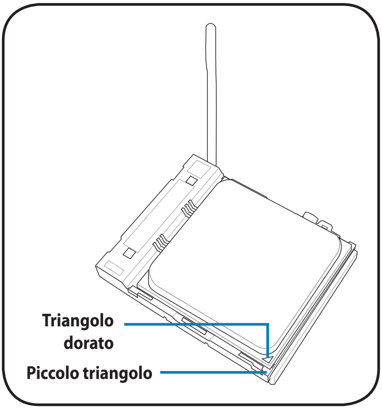
- I socket AMD AM2 e AM2+ sono compatibili con i processori AMD AM2, AM2+ e AM3.
- Il socket AMD AM3 è compatibile il processore AMD AM3. NON installare un processore AMD AM2+ / AM2 su un socket AM3. Soltanto determinati modelli di schede madri AM3 supportano i processori AM3+ mediante l'aggiornamento del BIOS. Per approfondimenti, consultare il sito del supporto ASUS.

1. Individuare il socket della CPU sulla scheda madre.
2. Sbloccare il socket premendo la levetta laterale, quindi sollevarla di un angolo di 90º.

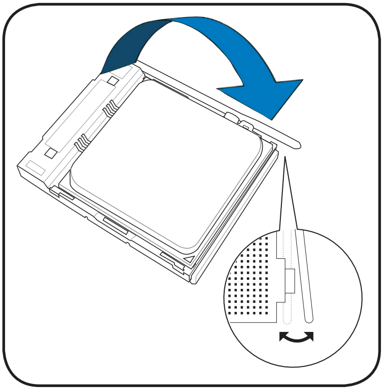
Assicurarsi che la levetta del socket sia sollevata di 90°, altrimenti la CPU non potrà essere inserita completamente.



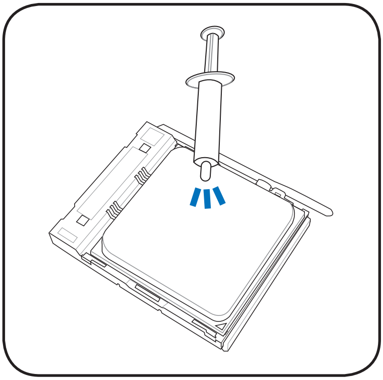
3. Posizionare la CPU sul socket, in modo che l'angolo della CPU con il triangolo dorato corrisponda all'angolo del socket con un piccolo triangolo.
4. Inserire con attenzione la CPU all'interno del socket fino a bloccarla in posizione.



5. Posizionata la CPU, spingere verso il basso la levetta del socket per fissare la CPU. La levetta si fissa lateralmente con uno scatto.



6. Applicare della pasta termoconduttiva sulla superficie esposta della CPU, che sarà a contatto con il dissipatore di calore, assicurandosi che sia stesa in modo da formare uno strato liscio e sottile.



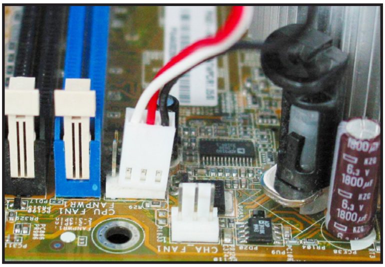
Determinati dissipatori di calore sono provvisti di pasta termica pre-applicata.In tal caso, ignorare questo passaggio.

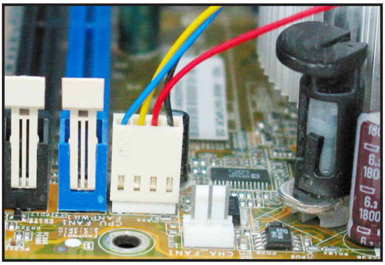
Il materiale della pasta termoconduttiva è tossico e non commestibile. NON ingerirlo. In caso di contatto con gli occhi o con l'epidermide, lavare immediatamente e consultare personale medico specializzato.

1.2 Installazione Dissipatore e Ventola

Per installare il dissipatore di calore e la ventola della CPU:

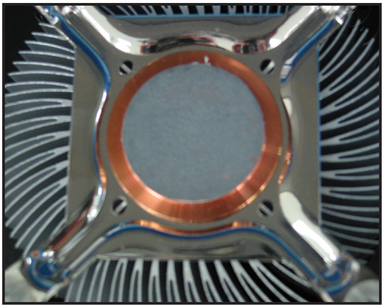
1. Selezionare un gruppo ventola-dissipatore che sia certificato Intel o AMD in base alla scheda madre. Sono presenti connettori per la ventola a 3-pin (sinistra) e 4-pin (destra). Solamente ventole per CPU con connettori a 4-pin supportano la tecnologia ASUS Q-Fan.





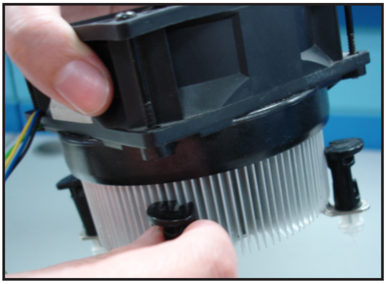
Dissipatori di calore certificati Intel:

2. Alcuni dissipatori di calore sono provvisti di pasta termica già applicata.In questo caso, evitare di toglierla e rimuovere solamente la pellicola protettiva prima dell'installazione. Altrimenti,prima dell'operazione, applicare alcune gocce di pasta termica sull'area esposta della CPU che verrà a contatto con il dissipatore di calore. Assicurarsi di stendere la pasta in modo da formare uno strato liscio e sottile.



Per evitare di sporcarsi con la pasta, NON spargerla direttamente con il dito.

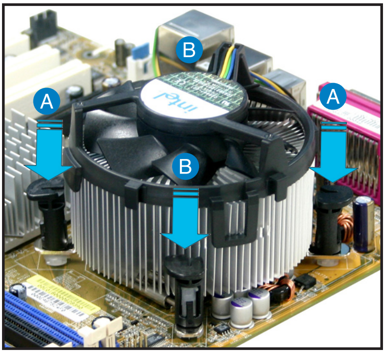
3. Orientare i fermi con l'estremità più piccola rivolta verso l'esterno.

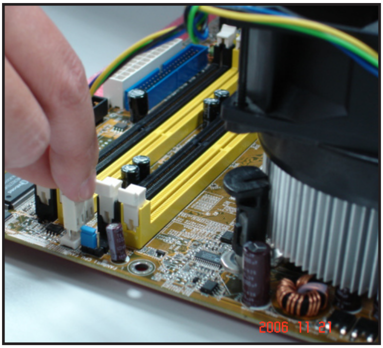


Italiano

4. Spingere verso il basso due fermi alla volta in sequenza diagonale per fissare il gruppo dissipatore-ventola in posizione.

5. Collegare il cavo della ventola della CPU al connettore corrispondente sulla scheda madre.

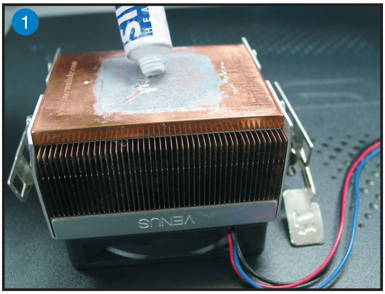


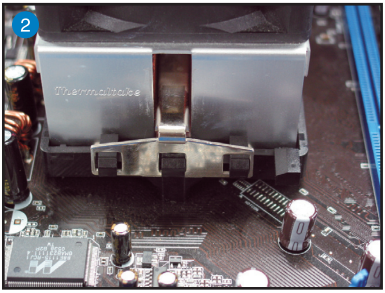


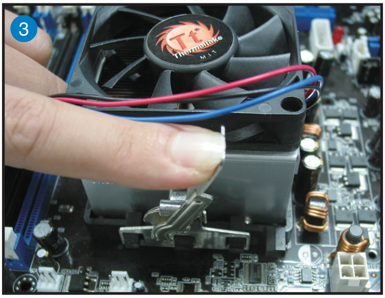
NON dimenticare di collegare il connettore della ventola della CPU! In caso di errore nella connessione di questo connettore, si possono verificare errori di monitoraggio hardware. Per ottimizzare l'area di dissipazione del calore, consigliamo di utilizzare un dissipatore omnidirezionale.

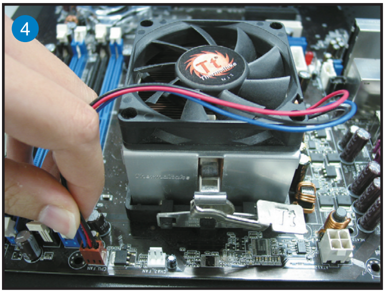
Dissipatori di calore certificati AMD:

Per installare un dissipatore di calore certificato AMD, seguire i passaggi illustrati nelle immagini sottostanti:







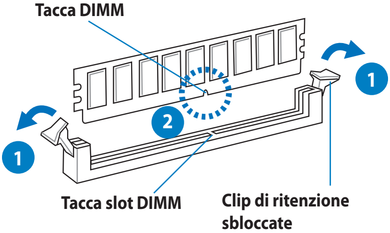


1.3 Installazione di un Modulo DIMM

Prima di aggiungere o rimuovere un modulo DIMM o altri componenti del sistema, assicurarsi di aver disinserito il cavo di alimentazione, altrimenti potrebbe essere seriamente danneggiata sia la scheda madre che altri componenti del sistema.

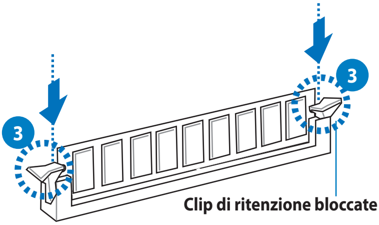
Installazione di un modulo DIMM in una presa DIMM con doppia clip

1. Sbloccare la presa DIMM premendo le clip di ritenzione verso l'esterno.
2. Allineare il modulo DIMM con la presa in modo che la tacca sul modulo corrisponda alla tacca sulla presa.



Un modulo DIMM ha una tacca che ne consente l'inserimento in una sola posizione. NON forzare il modulo all'interno della presa per evitare di danneggiarlo.

3. Tenere il modulo DIMM alle estremità ed inserirlo verticalmente nella presa, applicando una certa forza, fino a quando le clip di ritenzione non scattano nuovamente in posizione e il modulo è saldamente alloggiato nella corretta posizione.

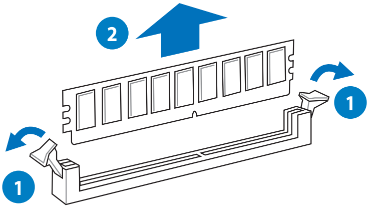


Inserire sempre il modulo di memoria DIMM all'interno della presa IN SENSO VERTICALE per evitare di danneggiare la tacca sulla DIMM.

- Per installare due o più DIMM, consultare il manuale utente presente nella confezione della scheda madre.
- Consultare il manuale utente per trovare un elenco dei fornitori qualificati di moduli di memoria.

Rimozione di un modulo DIMM da una presa DIMM con doppia clip

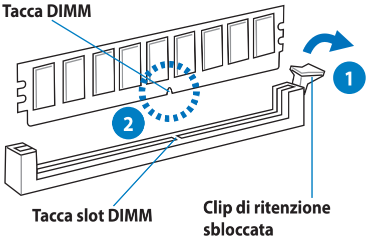
1. Premere simultaneamente verso l'esterno le clip di ritenzione per sbloccare il modulo DIMM.
2. Rimuovere il modulo dalla presa.



Durante la pressione delle clip di ritenzione,sostenere leggermente con le dita il modulo di memoria, poichè,se espulso con troppa forza, potrebbe essere danneggiato.

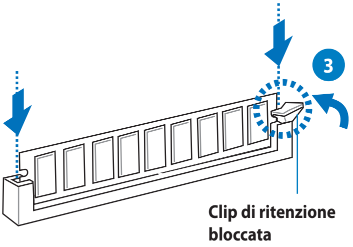
Installazione di un modulo DIMM in una presa DIMM con una sola clip

1. Sbloccare la presa DIMM premendo la clip di ritenzione verso l'esterno.
2. Allineare il modulo DIMM con la presa in modo che la tacca sul modulo corrisponda alla tacca sulla presa.



Un modulo DIMM ha una tacca che ne consente l'inserimento in una sola posizione. NON forzare il modulo all'interno della presa per evitare di danneggiarlo.

3. Tenere il modulo DIMM alle estremità ed inserirlo verticalmente nella presa, applicando una certa forza, fino a quando la clip di ritenzione non scattano nuovamente in posizione e il modulo è saldamente alloggiato nella corretta posizione.

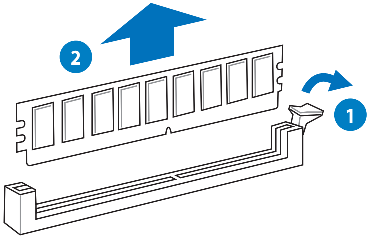


Inserire sempre il modulo di memoria DIMM all'interno della presa IN SENSO VERTICALE per evitare di danneggiare la tacca sulla DIMM.

- Per installare due o più DIMM, consultare il manuale utente presente nella confezione della scheda madre.
- Consultare il manuale utente per trovare un elenco dei fornitori qualificati di moduli di memoria.

Rimozione di un modulo DIMM da una presa DIMM con una sola clip

1. Premere verso l'esterno la clip di ritenzione per sbloccare il modulo DIMM.
2. Rimuovere il modulo dalla presa.

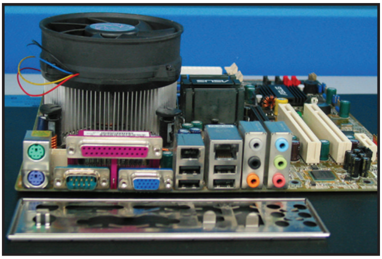


Durante la pressione della clip di ritenzione,sostenere leggermente con le dita il modulo di memoria, poichè,se espulso con troppa forza, potrebbe essere danneggiato.

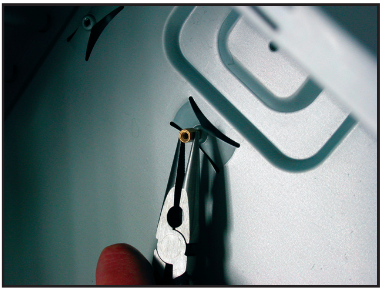
1.4 Installazione della Scheda Madre

1. Le porte I/O differiscono in relazione alla scheda madre. Utilizzare e installare solamente le mascherine I/O fornite con la scheda madre.

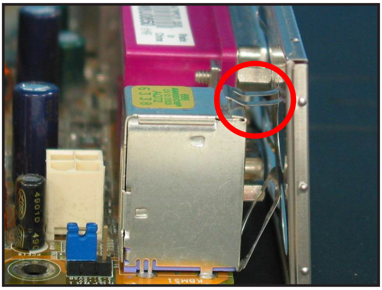
Alcuni profili affilati potrebbero causare lesioni. Prima di installare la scheda madre e la mascherina I/O,è consigliabile indossare un paio di guanti resistenti al taglio e alla foratura.



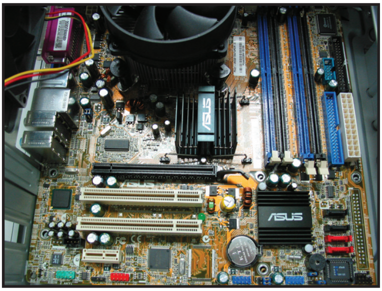
2. Inserire i dadi distanziatori nei rispettivi fori sulla placca metallica.



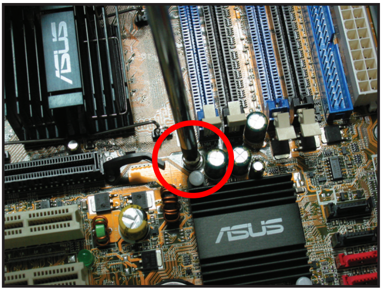
3. Fare attenzione durante l’installazione della mascherina I/O poichè i suoi profili taglienti potrebbero danneggiare le porte I/O.



4. Posizionare il lato I/O della scheda madre rivolto verso il retro del telaio e mettere la scheda madre all’interno del telaio.



5. Inserire e stringere senza serrare le viti in sequenza diagonale. Dopo aver inserito tutte le viti, stringerle a mano.



- Prima di installare la scheda madre,è possibile rimuovere le coperture metalliche degli slot per le schede di espansione, che si trovano sul retro del telaio, poichè, in alcuni modelli di telaio, l'operazione potrebbe essere più difficoltosa dopo l'installazione della scheda madre.
- NON serrare completamente le viti per non danneggiare la scheda madre.

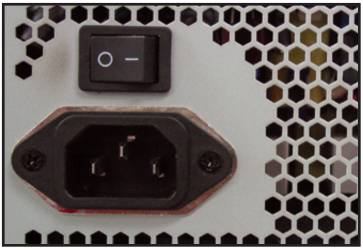
1.5 Installazione dell'Unità di Alimentazione

Due sono i tipi di unità di alimentazione maggiormente utilizzati: alimentazione con PFC attiva (Power Factor Correction) e con PFC passiva.

1. Scegliere un'unità di alimentazione.

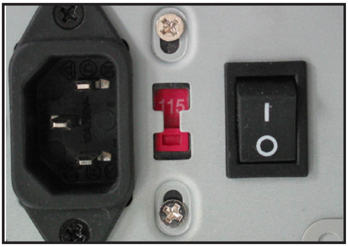
Alimentazione con PFC attiva:

PFC attiva corregge automaticamente la tensione di ingresso.

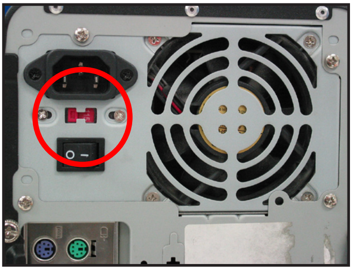


Alimentazione con PFC passiva:

PFC passiva necessita della regolazione manuale della tensione d'ingresso.



2. Con alimentazione a PFC passiva, regolare il voltaggio in ingresso in base al paese di utilizzo.



La mancata o errata regolazione del valore della tensione in ingresso potrebbe causare seri danni al sistema.

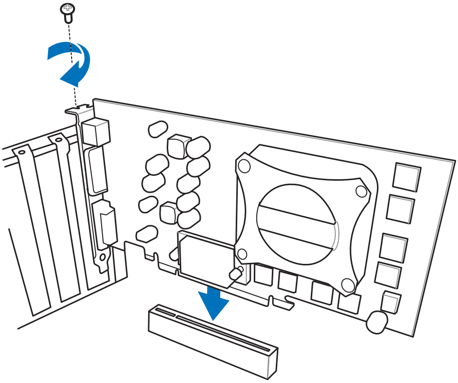
Utilizzare solamente unità di alimentazione con certificazioni sulla sicurezza. Un'unità di alimentazione instabile potrebbe danneggiare la scheda madre ed altri componenti. Fare riferimento al manuale utente per sapere quali sono le unità di alimentazione che soddisfano i requisiti della scheda madre.

1.6 Installazione Scheda di Espansione

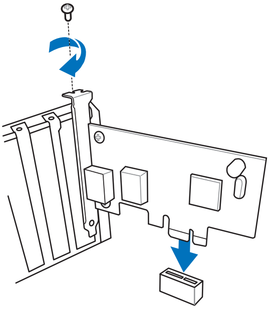
Per installare una scheda di espansione:

1. Rimuovere la copertura metallica dello slot dove installare la scheda di espansione.
2. Installare la scheda di espansione e assicurarsi che sia alloggiata correttamente all'interno dello slot.
3. Avvitare per fissare la scheda allo slot.
4. Ripetere i passaggi precedenti per procedere all'installazione di un'altra scheda.

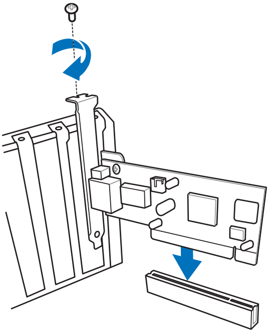
Scheda PCIE x16



Scheda PCIE x1



Scheda PCI



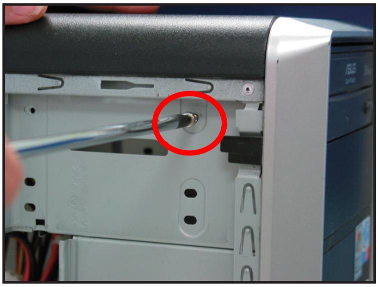
- Per i dettagli della configurazione, consultare la documentazione fornita con la scheda di espansione, mentre per un'eventuale configurazione dei jumper, successiva all'installazione della scheda di espansione, fare riferimento al manuale utente della scheda madre.
- Per quanto riguarda le modalità di connessione del cavo segnale della scheda di espansione, leggere il manuale utente della scheda madre.

1.7 Installazione delle Unità Disco

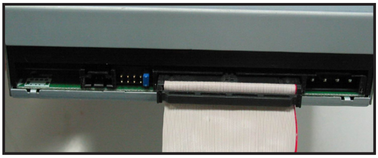
1.7.1 Disco Ottico PATA

1. Rimuovere la finta copertura e far scorrere l'unità ottica all'interno dell'alloggiamento.

2. Allineare i fori delle viti e fissare l'unità disco con le viti.

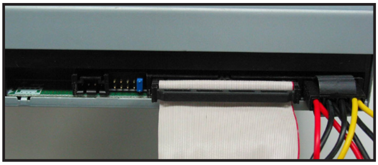


3. Orientare e collegare il cavo IDE all'unità ottica. La striscia rossa del cavo IDE è l'estremità pin1 e deve corrispondere alla tacca indicata con Pin1 sull'unità ottica.

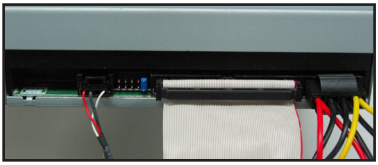


I cavi IDE sono a prova di errore. Non forzare mai il cavo IDE nel connettore.

4. Collegare il cavo di alimentazione a 4-pin all'unità ottica

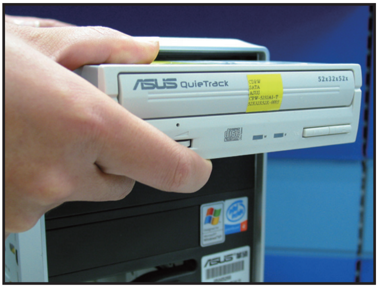


5. Collegare il cavo audio al connettore sull'unità ottica.

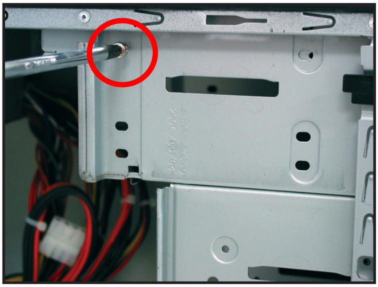


1.7.2 Disco Ottico SATA

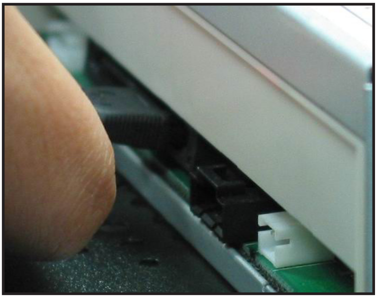
1. Rimuovere la finta copertura e far scorrere l’unità ottica all’interno dell’alloggiamento.



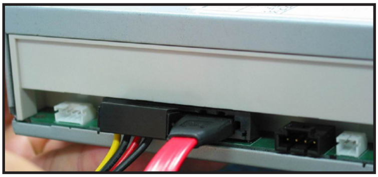
2. Allineare i fori delle viti e fissare l’unità disco con le viti.



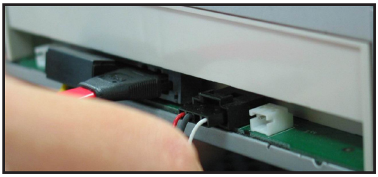
3. Orientare e collegare il cavo SATA all’unità ottica. I cavi SATA sono a prova di errore. Non forzare mai il cavo SATA nel connettore.



4. Collegare il cavo di alimentazione SATA all'unità ottica.

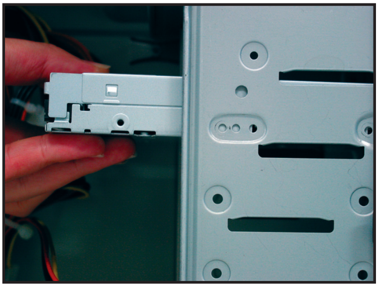


5. Collegare il cavo audio al connettore sull'unità ottica.

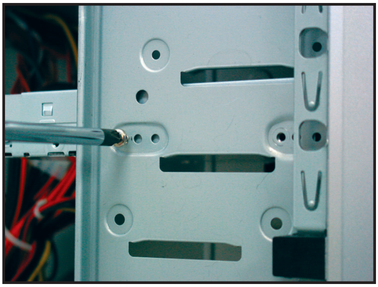


1.7.3 Disco Floppy

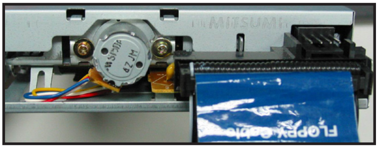
1. Rimuovere la finta copertura e far scorrere l'unità ottica all'interno dell'alloggiamento.



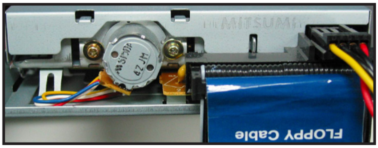
2. Allineare i fori delle viti e fissare l'unità disco con le viti.



3. Orientare e collegare il cavo dell'interfaccia floppy all'unità stessa. La striscia rossa del cavo è l'estremità pin1 e deve corrispondere al pin1 sull'unità floppy.



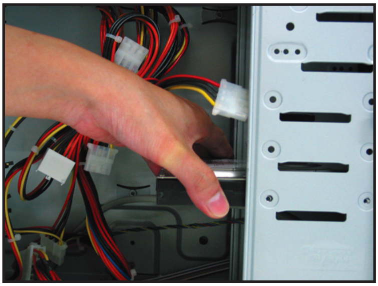
4. Collegare il cavo di alimentazione dell'unità floppy al rispettivo connettore sul retro dell'unità.



Italiano

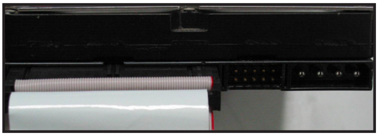
1.7.4 Disco Rigido PATA

1. Inserire il disco rigido PATA all'interno dell'alloggiamento.

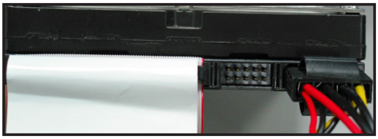


2. Allineare i fori delle viti e fissare l'unità disco con le viti.

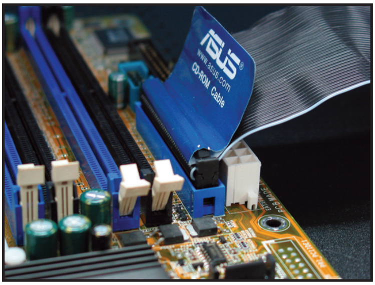
3. Orientare e collegare il cavo del segnale all'unità disco rigido. La striscia rossa sul cavo indica l'estremità pin1. Far corrispondere la tacca antierrore e non forzare il cavo all'interno del connettore.



4. Collegare il cavo di alimentazione a 4-pin al connettore sul retro dell'unità disco rigido.

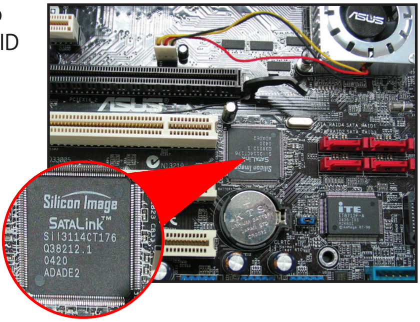


5. Collegare l'altra estremità del cavo del segnale allo slot corrispondente sulla scheda madre.



Note per l’Installazione di un Disco Rigido PATA

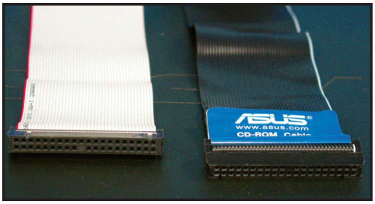
- Se il sistema operativo è installato sul disco rigido controllato dal RAID o altri controller, per prima cosa è necessario installare i driver dei controller sul disco rigido.


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

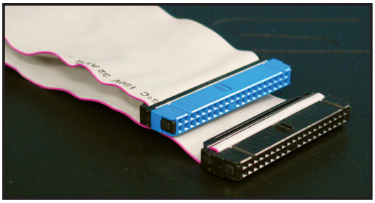
- I cavi sono provvisti di linguette tiranti e non danneggiare i pin durante la disconnessione. Installare le unità disco in base alle etichette dei cavi.

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

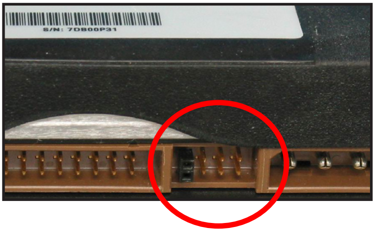
- Per le unità disco ATA IDE sono disponibili due cavi, il più recente 80 wire (destra) e il meno recente 40 wire (sinistra). Per unità disco ATA66/100/133, solamente il cavo 80 wire garantisce delle prestazioni ottimali. I cavi 40 wire solitamente sono utilizzati per unità ottiche.



- Il connettore del cavo è codificato con colori. Quello blu è per il connettore host, mentre quello nero/grigio è per l’unità disco primario/secondario.

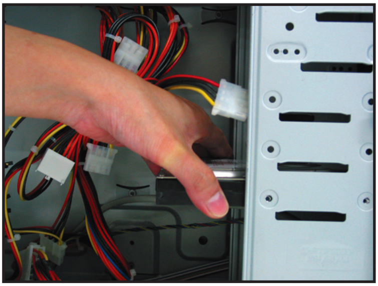


- Quando vengono collegate due periferiche IDE, è necessario impostare i jumper su posizioni diverse, uno in master e uno in slave. Se viene utilizzato un cavo 80 wire, è possibile utilizzare la modalità “cable select”.

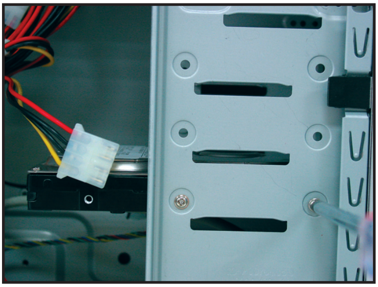

S/N: 7DB00P31

1.7.5 Disco Rigido SATA

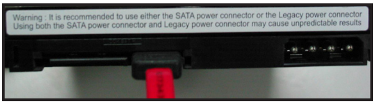
1. Inserire il disco rigido SATA nell'apposito alloggiamento.



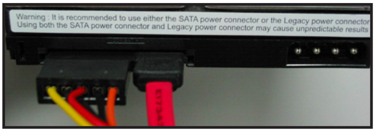
2. Allineare i fori delle viti e fissare l'unità disco con le viti.



3. Orientare e collegare il cavo SATA all'unità disco rigido. Il cavo può essere inserito in una sola posizione.

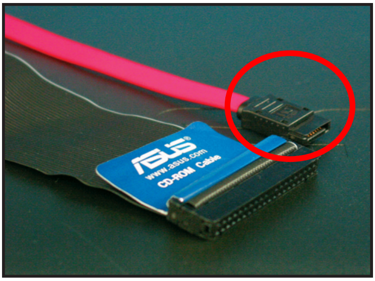

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Collegare il cavo di alimentazione SATA al connettore sul retro dell'unità disco rigido.

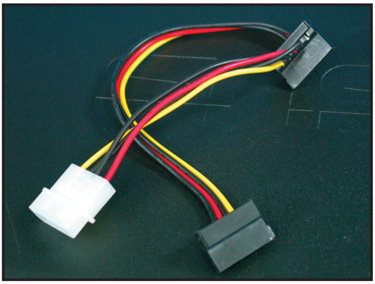

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Note per l'installazione di un Disco Rigido SATA

- L'interfaccia Serial ATA (SATA) fornisce una velocità di trasmissione dati elevata, e una migliore tolleranza della tensione. Le ridotte dimensioni del cavo SATA risolvono anche il problema del collegamento e consentono un migliore ricircolo dell'aria all'interno del telaio.

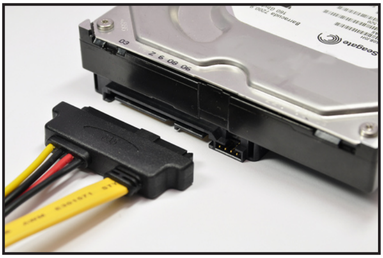

ASUS
www.asus.com
CD-ROM Cable

- Il connettore del cavo di alimentazione SATA è diverso dai tradizionali connettori di alimentazione a 4-pin. La scheda madre ASUS è dotata di cavi con adattatori di alimentazione nel caso in cui l'unità di alimentazione non fosse provvista di questo nuovo connettore.

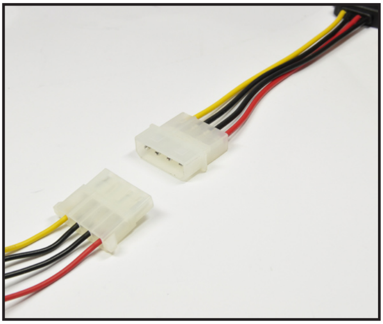


1.7.6 Disco Rigido SAS

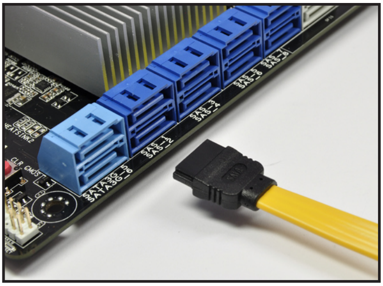
1. Orientare il cavo combinato segnale SAS / alimentazione e connetterlo al disco rigido. Il cavo può essere inserito in una sola direzione.



2. Collegare il cavo di alimentazione SAS al connettore di alimentazione sull'unità di alimentazione.



3. Collegare il cavo di segnale SAS al connettore di alimentazione sulla scheda madre.

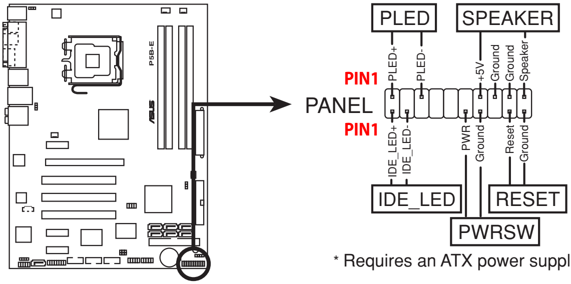


1.8 Cavi del Pannello Frontale

Per collegare i cavi del pannello frontale:

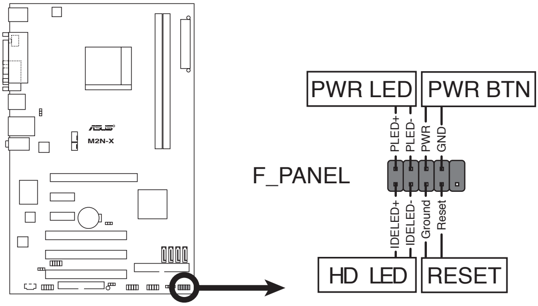
- RESET (Reset Switch - Tasto di ripristino)
- PLED (Power LED - LED di alimentazione)
- PWRSW (Power Switch - Tasto di accensione)
- IDE_LED (IDE Hard Disk Active LED - LED disco rigido IDE attivo)
- SPEAKER (Speaker Connector - Connettore altoparlanti)

Connettore a 20-8 pin del pannello frontale


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
PIN1
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

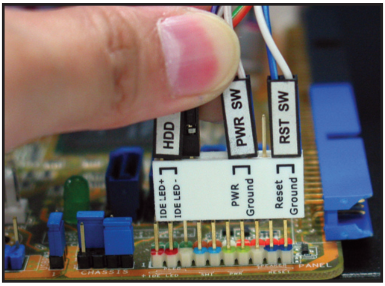
Connettore a 10-1 pin del pannello frontale


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- I cavi del pannello frontale del telaio potrebbero essere diversi per modello e dimensione. Collegare questi connettori sulla scheda madre in base alle etichette.
- Se i LED non si illuminano e la posizione dei pin è corretta, è possibile che siano stati confusi i pin di messa a terra con i pin del segnale. Solitamente il cavo bianco è destinato ai pin di messa a terra e quello codificato con colori è riservato ai pin del segnale.
- A differenza dei cavi IDE_LED e PLED, i cavi del pannello frontale SPEAKER, RESET e PWRSW non hanno un orientamento specifico. Collegare il cavo PIN1 al connettore PIN1 della scheda madre.
- Il connettore del pannello frontale varia in relazione al modello della scheda madre.Per informazioni, consultare il manuale utente.

ASUS Q-Connector

L'installazione con ASUS Q-Connector semplifica e velocizza la connessione e la disconnessione dei cavi tramite l'impiego di un singolo e comodo modulo. Per approfondimenti, consultare il manuale utente.

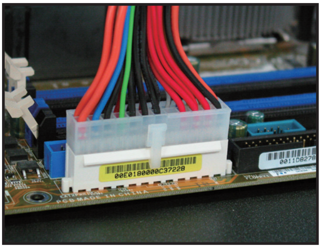


Q-connector è disponibile su modelli selezionati.Per approfondimenti, consultare il manuale utente.

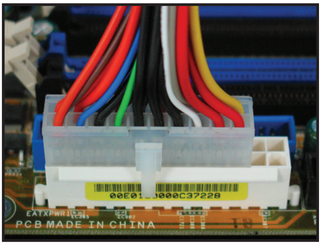
1.9 Connessione di ATX Power

I connettori ATX power possono essere inseriti in un'unica posizione. Utilizzare il gancio laterale per fissare i connettori alla scheda madre. NON forzare i connettori di alimentazione maschi nei corrispondenti connettori femmina sulla scheda madre. Solitamente sulla scheda madre sono presenti due connettori, un connettore a 24-pin e uno a 4-pin. Alcune unità di alimentazione meno recenti potrebbero avere soltanto un connettore di alimentazione a 20-pin per l'inserimento sulla scheda madre di un connettore a 24-pin.

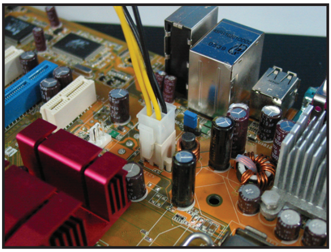
Connettore di alimentazione a 24-pin



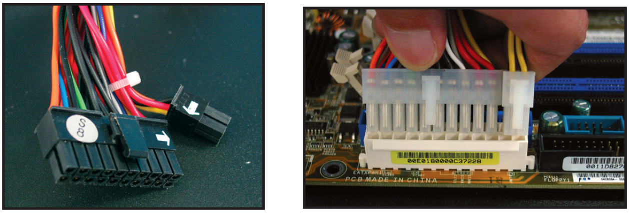
Connettore di alimentazione a 20-pin (sul corrispondente femmina a 24-pin)



Connettore di alimentazione a 4-pin

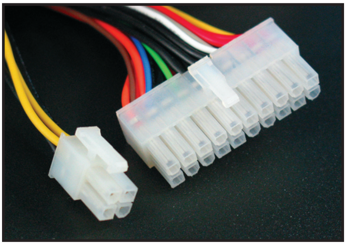


- Durante la connessione dei connettori di alimentazione alla scheda madre, NON collegare l'alimentazione CA esterna.
- Assicurarsi che i connettori di alimentazione siano fissati saldamente sulla scheda madre.
- Se l'unità di alimentazione supporta 20-pin+4-pin, è possibile combinare i due connettori e installarli sui connettori a 24-pin della scheda madre.

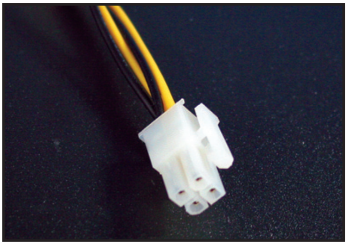


Connettori di alimentazione

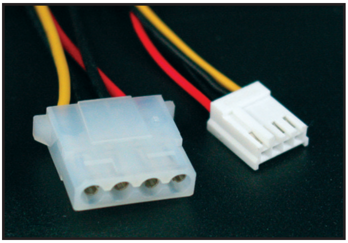
Connettore ATX a 20+4 (24) pin



Connettore ATX a 4-pin

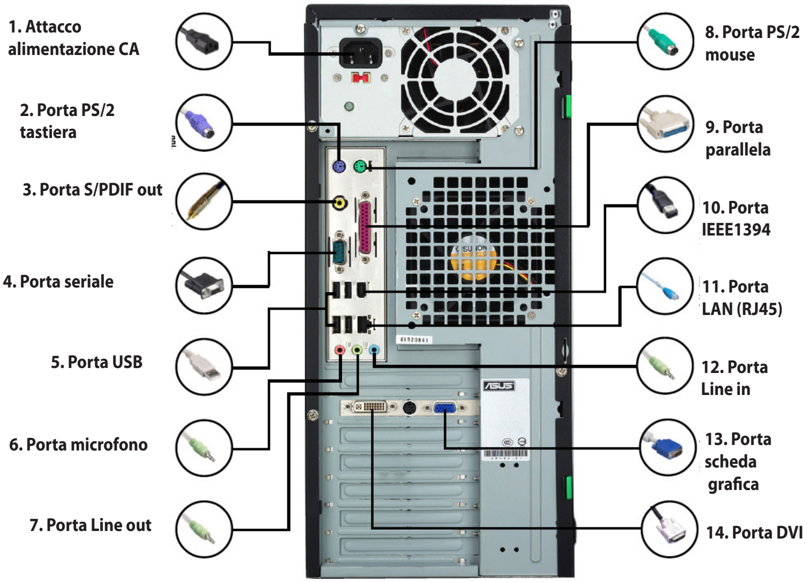


Connettore alimentazione periferica (sinistra)
Connettore alimentazione floppy (destra)



1.10 Periferiche e Accessori

Per la connessione di periferiche e accessori,fare riferimento alla figura sottostante.


1. Attacco alimentazione CA
2. Porta PS/2 tastiera
3. Porta S/PDIF out
4. Porta seriale
5. Porta USB
6. Porta microfono
7. Porta Line out
8. Porta PS/2 mouse
9. Porta parallela
10. Porta IEEE1394
11. Porta LAN (RJ45)
12. Porta Line in
13. Porta scheda grafica
14. Porta DVI

1. Attacco alimentazione CA + prolunga

2. Porta PS/2 tastiera + tastiera

3. Porta S/PDIF out + sistema altoparlanti digitale 5.1

4. Porta seriale + base PDA

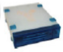
5. Porta USB + periferiche USB

6. Porta microfono + microfono

7. Porta Line out + altoparlanti

8. Porta PS/2 mouse + mouse

9. Porta parallela + stampante

10. Porta IEEE1394 + unità disco rigido esterna

11. Porta LAN (RJ45) + modem

12. Porta Line in + registratore

13. Porta VGA + monitor CRT

14. Porta DVI + monitor LCD

I connettori del pannello posteriore variano in relazione al modello. Per approfondimenti, consultare il manuale utente.

1.11 Inizializzazione

All'avvio il sistema esegue l'autodiagnostica o POST. Durante l'esecuzione del processo, il BIOS emette un bip.

Bip BIOS	Descrizione
Un bip continuo seguito da tre bip brevi	Nessuna VGA rilevata
Un bip continuo seguito da due bip brevi quindi una pausa (ripetuto)	Nessuna memoria rilevata
Un bip continuo seguito da quattro bip brevi	Guasto componente hardware (AMI BIOS)
Quattro bip brevi	Guasto componente hardware (AWARD BIOS)

Risoluzione dei problemi

Problema	Azione
• Il computer non si accende • Il LED di alimentazione non si accende. • La ventola dell'alimentazione non funziona.	Assicurarsi che il cavo di alimentazione sia collegato correttamente.
Il computer è acceso ma il monitor è nero.	• Assicurarsi che il monitor sia acceso e che il cavo VGA sia collegato correttamente. • Regolare la luminosità e il contrasto del monitor. • Spegnere il computer e rimuovere il cavo di alimentazione. Verificare che la scheda VGA sia installata correttamente.
Nessuna memoria rilevata.	• Assicurarsi che il modulo di memoria sia corretto • Assicurarsi che la DIMMS sia alloggiata correttamente nel socket DIMM. • Assicurarsi che il modulo di memoria sia presente nell'elenco fornitori qualificati. Far riferimento al manuale utente per il QVL.
Errore floppy (l'indicatrore rimane acceso o sullo schermo appare un messaggio di avvertimento).	• Verificare la configurazione BIOS dell'unità disco floppy. • Assicurarsi che i cavi per il disco floppy siano collegati correttamente.
Errore unità disco rigido/ottico (non riconosciuto o rilevato).	• Verificare la corretta posizione del jumper. (Master/Slave) • Verificare la configurazione BIOS dell'unità disco disco rigido/ottico. • Assicurarsi che i cavi della periferica siano collegati correttamente. • Assicurarsi che i driver della periferica siano installati.

Capitolo 2:Gestione/Aggiornamento BIOS

2.1 Utilità AFUDOS

L'Utilità AFUDOS consente di aggiornare il file BIOS in ambiente DOS utilizzando un disco floppy di avvio con il file BIOS aggiornato. Questa utility consente anche di copiare il file BIOS in uso, che è possibile utilizzare come backup quando si verificano problemi con il BIOS o quando il BIOS viene danneggiato durante il processo di aggiornamento.

Copia del BIOS in uso

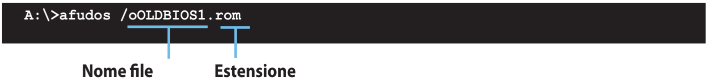
Per copiare il file BIOS corrente utilizzando l'utilità AFUDOS:

- Assicurarsi che il disco floppy non sia protetto da scrittura e che ci siano almeno 1024KB di spazio disponibile per salvare il file.
- Le schermate del BIOS qui di seguito sono puramente indicative. Le reali schermate potrebbero differire da quelle qui riportate.

1. Copiare l'utilità AFUDOS (afudos.exe) dal supporto DVD della scheda madre al disco floppy di avvio creato in precedenza.
2. Avviare il sistema in modalità DOS, quindi nella finestra digitare:

   `afudos /o[filename]`

   dove [nome file] è un qualsiasi nome assegnato dall'utente al file con un massimo di otto caratteri alfanumerici per il nome file principale e tre caratteri alfanumerci per l'estensione.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Premere <Invio>. L'utilità copia il file BIOS in uso sul disco floppy.

```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
   Reading flash ..... done
   Write to file...... ok
A:\>
```

L'utilità ritorna alla finestra DOS dopo aver eseguito la copia del file BIOS corrente.

Aggiornamento file BIOS

Per aggiornare il file BIOS utilizzando l'utilità AFUDOS:

1. Visitare il sito web ASUS (www.asus.com) e scaricare il file BIOS più recente per la scheda madre. Salvare il file BIOS su un disco floppy di avvio.

Annotare il nome file del BIOS. È necessario digitare il nome del file BIOS esatto all'interno della finestra DOS.

2. Copiare l'utilità AFUDOS (afudos.exe) dal supporto DVD della scheda madre al disco floppy di avvio creato in precedenza.
3. Avviare il sistema in modalità DOS, quindi nella finestra digitare:

   `afudos /i[filename]`

   dove [nome file] è il file BIOS originale o più recente presente nel disco floppy di avvio.

```
A:\>afudos /iP5K3D.ROM
```

4. L'utilità verifica il file e avvia l'aggiornamento del BIOS.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

   WARNING!! Do not turn off power during flash BIOS
   Reading file ....... done
   Reading flash ...... done

   Advance Check ......
   Erasing flash ...... done
   Writing flash ...... 0x0008CC00 (9%)
```

NON spegnere o ripristinare il sistema durante l'aggiornamento del BIOS per evitare errori nell'avvio del sistema!

5. L'utilità ritorna alla finestra DOS dopo che il processo di aggiornamento del BIOS viene vompletato. Riavviare il sistema dall'unità disco rigido.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

   WARNING!! Do not turn off power during flash BIOS
   Reading file ....... done
   Reading flash ...... done

   Advance Check ......
   Erasing flash ...... done
   Writing flash ...... done
   Verifying flash .... done

   Please restart your computer

A:\>
```

2.2 Utilità Award BIOS Flash

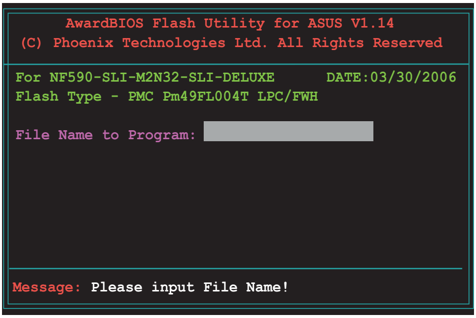
Aggiornamento del BIOS

Il Basic Input/Output System (BIOS) può essere aggiornato utilizzando l'Utilità AwardBIOS Flash. Seguire le istruzioni riportate di seguito per aggiornare il BIOS utilizzando l'utilità.

1. Scaricare il file BIOS più recente dal sito web ASUS. Rinominare il file con M2N32SLI.BIN e salvarlo su un disco floppy, CD ROM o un disco flash USB in **formato FAT 16/12**.

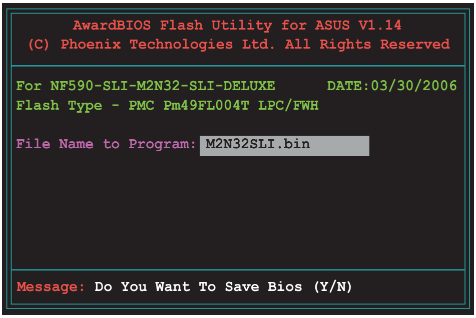
Salvare solamente il file BIOS aggiornato all'interno del disco per evitare di caricare il file BIOS errato.

2. Copiare l'Utilità AwardBIOS Flash (awdflash.exe) dalla cartella Software del supporto CD al disco floppy, CD ROM o un disco flash USB con la versione più recente del file BIOS.
3. Avviare il sistema in modalità DOS usando il disco floppy di avvio, CD ROM o un disco flash USB creato in precedenza.
4. In modalità DOS, usare <X:> (X sta per il nome del disco assegnato) per accedere alla cartella del disco floppy, CD ROM o disco flash USB in cui è stato salvato il file BIOS e l'Utilità AwardBIOS Flash.
5. Nella finestra, digitare awdflash quindi premere <Invio>. Appare la schermata Utilità Award BIOS Flash.



```
      AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

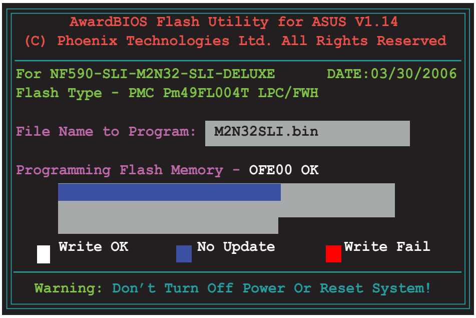
6. Digitare il nome del file BIOS nel campo File Name to Program, quindi premere <Invio>.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Premere <N> quando l'utilità chiede se si desidera salvare il file BIOS corrente. Viene visualizzata la seguente schermata.

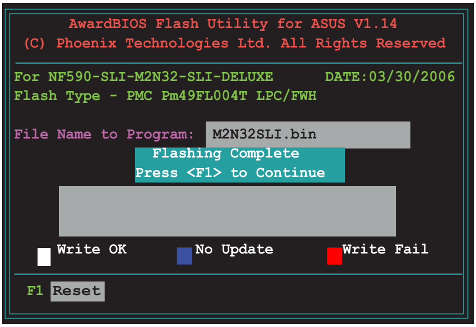
8. L'utilità verifica il file BIOS del disco floppy, CD ROM o nel disco flash USB e avvia la scrittura del file BIOS.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ⬜ Write OK      🟦 No Update      🟥 Write Fail

 Warning: Don't Turn Off Power Or Reset System!
```

NON spegnere o ripristinare il sistema durante la scrittura!

9. L'utilità visualizza il messaggio Flashing Complete che indica che la scrittura del file BIOS è stata eseguita. Rimuovere il disco quindi premere <F1> per riavviare il sistema.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                  Flashing Complete
                Press <F1> to Continue

 ⬜ Write OK      🟦 No Update      🟥 Write Fail

 F1 Reset
```

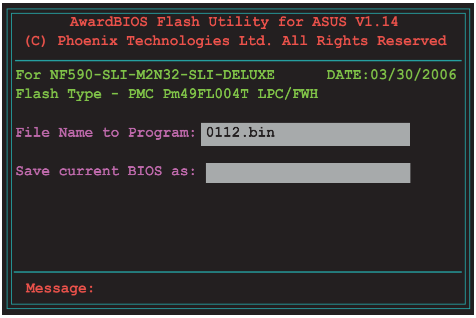
Salvataggio del file BIOS

È possibile utilizzare l'Utilità AwardBIOS Flash per salvare il file BIOS in uso. È possibile caricare il file BIOS in uso quando viene danneggiato durante il processo di scrittura.

Assicurarsi che ci sia spazio a sufficienza all'interno del disco floppy, CD ROM o del disco flash USB per salvare il file.

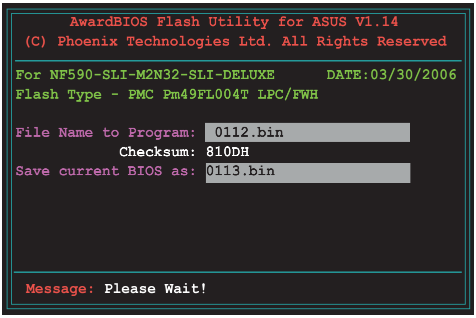
Per salvare il file BIOS utilizzando l'utilità AwardBIOS Flash:

1. Seguire i passaggi 1 - 6 del paragrafo precedente.
2. Premere <Y> quando l'utilità chiede se si desidera salvare il file BIOS in uso. Viene visualizzata la schermata di lato.



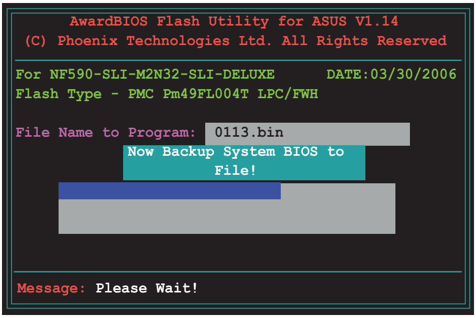
```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:





 Message:
```

3. Digitare un nome del file nel campo Save current BIOS as, quindi premere <Invio>.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin




 Message: Please Wait!
```

4. L'utilità salva il file sul disco, quindi ritorna al processo di scrittura del BIOS.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
            Now Backup System BIOS to
                      File!




Message: Please Wait!
```

2.3 Utilità ASUS Update

ASUS Update è un'utilità che consente di gestire, salvare e aggiornare il BIOS di una scheda madre in ambiente Windows®. In particolare, ASUS Update offre la possibilità di:

- Salvare il file del BIOS in uso
- Scaricare il file BIOS aggiornato da Internet
- Aggiornare il BIOS da un file BIOS aggiornato
- Aggiornare il BIOS direttamente da Internet
- Visualizzare le informazioni sulla versione del BIOS.

Questa utilità è disponibile nel disco di supporto fornito nella confezione della scheda madre.

> ASUS Update richiede una connessione Internet tramite una rete o un ISP (Internet Service Provider).

Installazione di ASUS Update

Per installare ASUS Update:

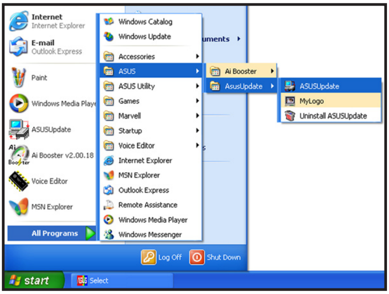
1. Inserire il disco di supporto nell'unità ottica.
2. Dal menu **Main**, cliccare sulla scheda **Utilities** e poi su **Install ASUS Update VX.XX.XX**.
3. L'utilità ASUS Update è quindi installata nel sistema.

Aggiornamento del BIOS attraverso Internet

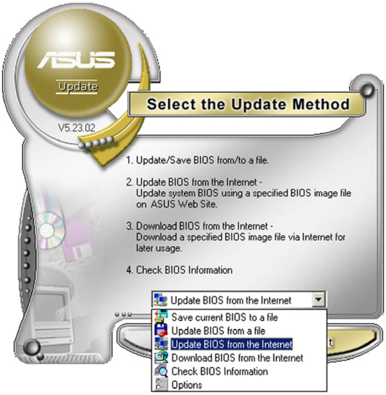
> Prima di aggiornare il BIOS tramite questa utilità, chiudere tutte le applicazioni di Windows®.

Per aggiornare il BIOS attraverso Internet:

1. Dal desktop di Windows®, cliccare **Start > Programmi > ASUS > ASUSUpdate > ASUSUpdate.** Appare la finestra principale di ASUS Update.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. Selezionare **Aggiorna BIOS da Internet** dal menu a discesa, e poi cliccare **Avanti**.


Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.

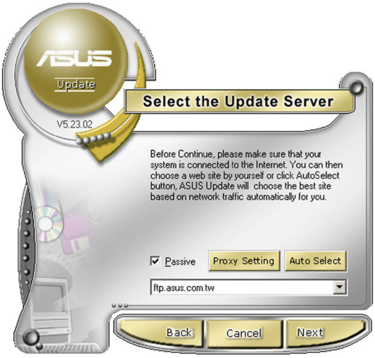
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Selezionare il sito FTP ASUS più vicino, per evitare congestioni di rete, o cliccare **Rileva automaticamente**.
Cliccare **Avanti**.


Update
V5.23.02
Select the Update Server

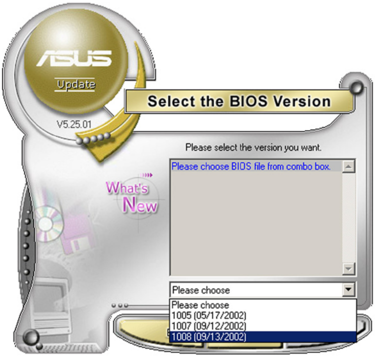
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. Dal sito FTP, selezionare la versione BIOS da scaricare e cliccare **Avanti**.


Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

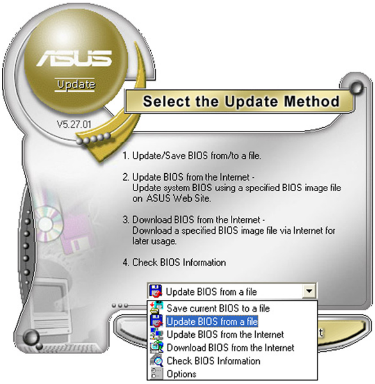
5. Seguire le istruzioni sullo schermo per completare il processo di aggiornamento.

L'utilità ASUS Update è in grado di aggiornarsi via Internet. Aggiornare sempre l'utilità per usufruire di tutte le funzionalità.

Aggiornamento del BIOS tramite un File BIOS

Per aggiornare il BIOS tramite un file BIOS:

1. Dal desktop di Windows®, cliccare **Start** > **Programmi** > **ASUS** > **ASUSUpdate** > **ASUSUpdate**. Appare la finestra principale di ASUS Update
2. Selezionare **Aggiorna BIOS da file** dal menu a discesa, quindi cliccare **Avanti**.


ASUS
Update
V5.27.01

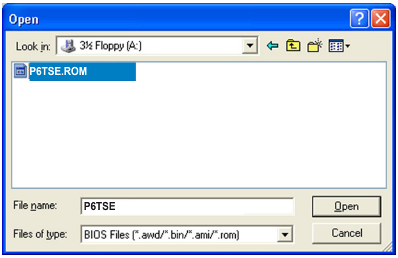
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from a file

Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Individuare il file BIOS dalla finestra **Apri** e poi cliccare **Apri**.
4. Seguire le istruzioni sullo schermo per completare il processo di aggiornamento.


Open
P6TSE.ROM
Open
Cancel

Look in: 3½ Floppy (A:)

File name: P6TSE

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Per garantire la compatibilità e la stabilità del sistema,assicurarsi di aver caricato le impostazioni predefinite del BIOS. Selezionare la voce **Load Setup Defaults** nel menu Exit.

2.4 ASUS BIOS Updater

ASUS BIOS Updater consente di aggiornare il BIOS in ambiente DOS. Questa utilità permette inoltre di copiare il file BIOS per utilizzarlo come copia di riserva, quando il BIOS cessa di funzionare o viene danneggiato, nel corso del processo di aggiornamento.

Le schermate dell'utilità di seguito riportate sono solo a carattere esemplificativo. Le vere schermate potrebbero differire da quanto qui visualizzato.

Prima di aggiornare il BIOS

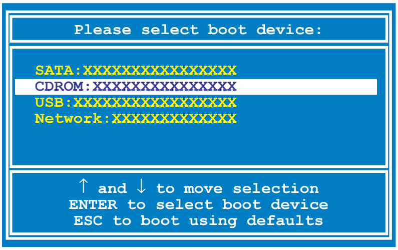
1. Preparare il DVD di supporto della scheda madre ed un'unità flash USB in formato FAT32/16 e in una singola partizione.
2. Scaricare il più aggiornato file BIOS e BIOS Updater dal sito ASUS http://support.asus.com e salvarli nell'unità flash USB.

- NTFS non è supportato in ambiente DOS. Non salvare il file BIOS e BIOS Updater su un disco rigido o un'unità flash USB in formato NTFS.
- Non salvare il file BIOS su un floppy disk a causa della limitata capacità del disco.

3. Spegnere il computer e disconnettere tutti i dischi SATA (opzionale).

Avvio del sistema in ambiente DOS

1. Inserire l'unità flash USB con l'ultima versione del file BIOS file e BIOS Updater nella porta USB.
2. Avviare il computer. Quando compare il logo ASUS, premere <F8> per visualizzare **BIOS Boot Device Select Menu**. Inserire il DVD di supporto nell'unità ottica e selezionare l'unità ottica come dispositivo di avvio.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

↑ and ↓ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Quando appare il menu **Make Disk**, selezionare la voce **FreeDOS command prompt** premendo il numero ad essa corrispondente.
4. Al prompt del FreeDOS, digitare `d:` e premere <Enter> passare dal Disco C (unità ottica) al Disco D (unità flash USB).

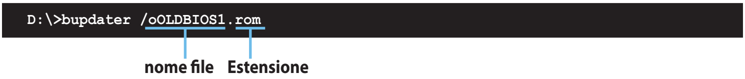
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Come eseguire una copia del BIOS

Per copiare il file BIOS con BIOS Updater:

Assicurarsi che nell'unità flash USB non sia attivata la protezione da scrittura e che lo spazio libero sia sufficiente per salvare il file.

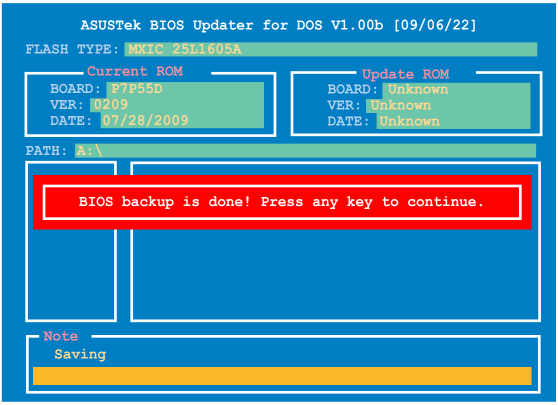
1. Al prompt del FreeDOS, digitare **`bupdater /o[filename]`** e premere <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

   Il [nome file] è un qualunque nome assegnato dall'utente e composto da max. otto caratteri alfanumerici per il nome file e da tre caratteri alfanumerici per il nome dell'estensione.

2. La schermata di backup di BIOS Updater mostra il processo di backup del BIOS in corso.Al termine dell'operazione, premere un tasto qualunque per ritornare al prompt del DOS.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                        Update ROM
 BOARD: P7P55D                      BOARD: Unknown
 VER: 0209                          VER: Unknown
 DATE: 07/28/2009                   DATE: Unknown
PATH: A:\

   BIOS backup is done! Press any key to continue.

Note
  Saving
```

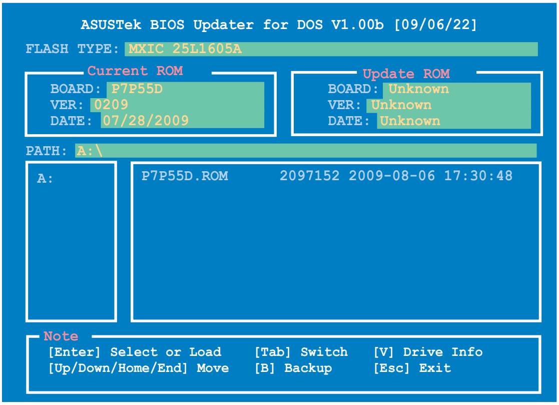
Aggiornamento del file BIOS

Per aggiornare il file BIOS con BIOS Updater:

1. Al prompt del FreeDOS, type **`bupdater /pc /g`** and press <Enter>.

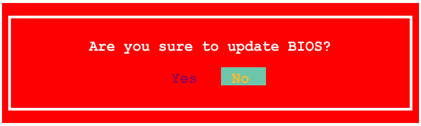
```
D:\>bupdater /pc /g
```

2. BIOS Updater visualizza la seguente schermata:



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
      Current ROM                     Update ROM
  BOARD: P7P55D                  BOARD: Unknown
  VER: 0209                      VER: Unknown
  DATE: 07/28/2009               DATE: Unknown
PATH: A:\
  A:          P7P55D.ROM      2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load     [Tab] Switch     [V] Drive Info
  [Up/Down/Home/End] Move    [B] Backup       [Esc] Exit
```

3. Premere <Tab> per spostarsi fra i campi della schermata e utilizzare i tasti <Su/Giù/Home/Fine> per selezionare il file BIOS e premere <Enter>. BIOS Updater controlla il file BIOS selezionato e richiede di confermare l'aggiornamento.



```
Are you sure to update BIOS?
      Yes    No
```

4. Selezionare **Yes** e premere <Enter>. Al termine del processo, premere <ESC> per uscire da BIOS Updater. Riavviare il computer.

Durante l'aggiornamento del BIOS, NON eseguire l'arresto o il reset del sistema, altrimenti potrebbe non essere più possibile riavviarlo!

- In BIOS Updater 1.04 e nelle versioni successive, dopo l'aggiornamento del BIOS, l'utilità esce automaticamente al prompt del DOS.
- Accertarsi di caricare le impostazioni predefinite del BIOS per garantire la compatibilità e la stabilità del sistema. Selezionare la voce **Load Setup Defaults** alla pagina **Exit** del menu del BIOS. Per i dettagli, consultare il Capitolo 3 del Manuale Utente della scheda madre.
- Dopo l'aggiornamento del BIOS, assicurarsi di collegare tutti i dischi SATA disconnessi in precedenza.

Capitolo 3: Risoluzione dei Problemi

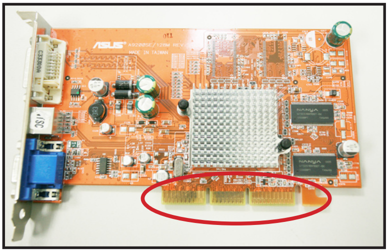
3.1 Risoluzione dei Problemi per Schede Madri

Dopo aver assemblato il proprio computer, si potrebbero presentare dei problemi al momento dell'avvio. Questo capitolo fornisce le risposte alle domande più comuni relative al PC prima di accedere al sistema operativo. Leggere questo capitolo per la risoluzione dei problemi di base. È possibile risparmiare tempo e grattacapi contattando il team di supporto tecnico ASUS o rispedire il prodotto per i servizi coperti da garanzia.

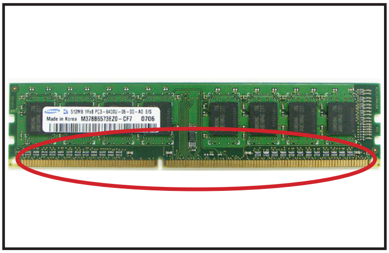
3.1.1 Risoluzione dei Problemi di Base

A. Connessione non buona

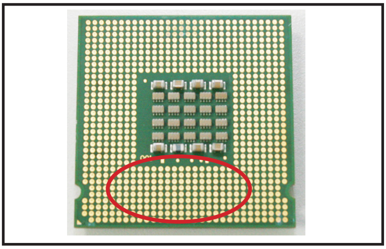
1. Assicurarsi che non ci sia sporcizia sui contatti dorati o i pin.
2. Utilizzare un bastoncino con cotone o una gomma per cancellare per pulire il contatto.Ricordarsi di rimuovere i residui della gomma per cancellare.



Contatti dorati della scheda VGA



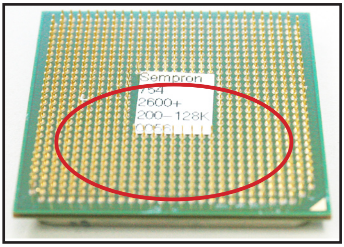
Contatti dorati DIMM



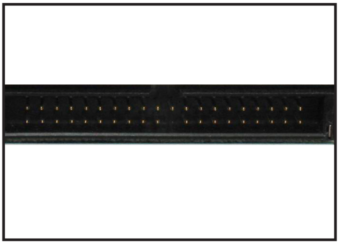
Punti di contatto dorati del processore LGA775

Maneggiare la scheda o il processore per i profili esterni e NON toccare i contatti dorati. L'elettricità statica potrebbe danneggiare seriamente il dispositivo.

3. Assicurarsi che non ci siano pin danneggiati o piegati sul connettore o la CPU. Un pin danneggiato o piegato potrebbe causare il malfunzionamento del componente. Contattare il rivenditore per ulteriore supporto.



Pin dorati per un processore AMD

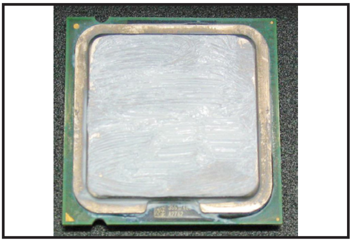


Pin di un connettore

Se i pin si danneggiano o piegano dopo l'acquisto, il rivenditore potrebbe richiedere il pagamento del servizio di riparazione. Alcune volte i pin danneggiati o piegati non sono RIPARABILI.

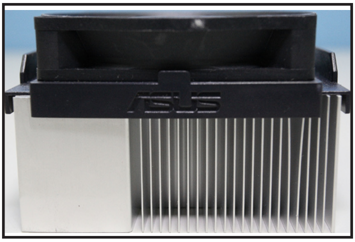
B. Surriscaldamento del Processore

1. Pulire la superficie della CPU con panni puliti. Applicare alcune gocce di pasta termica sull'area esposta della CPU che deve venire a contatto con il dissipatore di calore. Assicurarsi di spargere la pasta creando uno strato sottile.

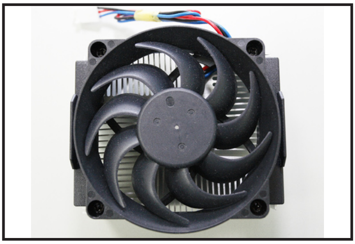


Superficie della CPU

2. Assicurarsi che non ci sia sporcizia sul dissipatore di calore e sulla ventola.



Vista laterale del dissipatore di calore e della ventola



Vista dall'alto del dissipatore di calore e della ventola

3. Seguire le istruzioni del produttore del dissipatore di calore e della ventola per pulire la sporcizia che potrebbe rallentare la velocità della ventola.

3.2 Altri Problemi Comuni

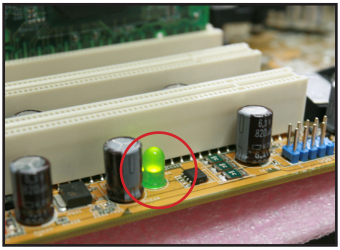
- Quando vengono rimosse le periferiche dal sistema, assicurarsi che tutti i cavi di alimentazione siano scollegati.
- Tutti i messaggi di errore vengono visualizzati sullo schermo durante il POST (Power-On Self-Test).
- Se vengono emessi dei bip dal BIOS, per i dettagli vedere la sezione 1.11.
- Consultare l'elenco di controllo riportato di seguito per ulteriori contolli.

	Controllo elementi					
	LED alimentazione	**Schermo**	**Dissipatore e ventola**	**Bip del BIOS**	**Msg. errore**	**Pag. rifer.**
Nessuna alimentazione	Spento	No	Stop	No	N/D	3-4
Nessuna schermata visualizzata	Acceso	No	Stop	No	N/D	3-5
	Acceso	No	In esecuzione	No	N/D	3-5
	Acceso	No	In esecuzione	Sì	N/D	3-5
Impossibile accedere al sistema operativo	Acceso	Sì	In esecuzione	Sì	Sì	3-5
	Acceso	Sì	In esecuzione	No	Sì	3-5
	Acceso	Sì	In esecuzione	No	No	3-5

Se quando viene risolto un problema ne sorge un altro, tornare nuovamente all'elenco di controllo. Se il problema persiste, contattare il rivenditore o il supporto tecnico ASUS per ulteriore aiuto.

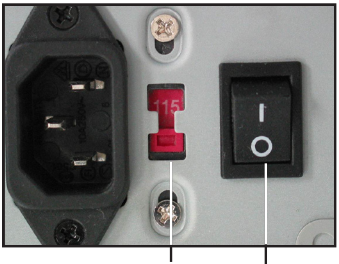
3.2.1 Assenza di Alimentazione

Le schede madri ASUS vengono fornite con il LED di alimentazione in standby. Il LED si illumina per indicare che il sistema è attivo. Se il LED non si illumina, seguire le istruzioni riportate di seguito per risolvere il problema.

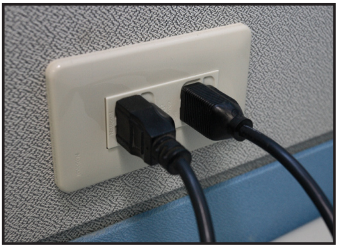


1. Assicurarsi che l'alimentatore sia impostato sulla tensione CA in ingresso della propria area e che sia acceso.

- Prima di regolare la tensione CA in ingresso, assicurarsi di staccare la presa di alimentazione. In caso contrario si potrebbero verificare gravi danni all'unità di alimentazione.
- Una regolazione errata della tensione CA di alimentazione potrebbe causare danni al sistema.



2. Assicurarsi di aver collegato il cavo di alimentazione alla presa a muro.
   - Collegare la spina direttamente alla presa a muro. NON collegarla ad una prolunga, ad un gruppo di continuità (UPS) o ad altri dispositivi.
   - Scambiare la spina del sistema e quella del monitor per verificare che la presa a muro funzioni correttamente.



3. Se il problema persiste, potrebbe essere necessario contattare il rivenditore per una nuova unità di alimentazione. Se l'unità di alimentazione funziona, contattare il rivenditore della scheda madre ASUS per il servizio in garanzia.

3.2.2 Impossibile Avviare e Visualizzare la Schermata

Molte volte il malfunzionamento della periferica o un'installazione non corretta possono causare problemi di avvio e di visualizzazione delle schermate.

Seguire le istruzioni di seguito per risolvere il problema.

1. Assicurarsi che i cavi di alimentazione sia collegati, inclusi quelli del sistema e del monitor.
2. Verificare se il problema deriva dalle periferiche di espansione.
   - Rimuovere tutte le schede e le periferiche di espansione. Utilizzare solamente schede madri, monitor, schede VGA, moduli di memoria, unità di alimentazione, dissipatori di calore e ventole, tastiere e mouse per riavviare il sistema.
   - Se il sistema funziona correttamente, la causa del problema è una delle periferiche di espansione. Reinstallare le periferiche di espansione rimosse dal sistema una alla volta per trovare quella difettosa.
3. Verificare se il problema deriva dai dispositivi di base del sistema.
   - Se ci sono dispositivi di riserva, è possibile sostituire quelli in esecuzione per trovare l'elemento difettoso, seguendo l'ordine "modulo di memoria, CPU, scheda madre, unità disco rigido/ottico, tastiera/mouse."

Quando si rileva una periferica difettosa, contattare il rivenditore per la manutenzione.

3.2.3 Impossibile Accedere al Sistema Operativo

1. Se il problema si verifica dopo aver aggiunto nuovo hardware, rimuovere l'hardware e riavviare il sistema. Se il sistema funziona correttamente senza l'hardware, la periferica potrebbe essere difettosa o incompatibile con il sistema. Contattare il rivenditore della periferica per l'assistenza.
2. Se il problema si verifica dopo aver aggiunto un software o un driver, seguire le istruzioni di seguito per risolvere il problema.
   a. Accedere al sistema operativo in modalità provvisoria e rimuovere il software o il driver.
   b. Per ulteriore supporto contattare la società del sistema operativo.
   c. Se le informazioni precedenti non sono sufficienti a risolvere il problema, potrebbe essere necessario formattare il disco rigido e installare nuovamente il sistema operativo.
3. Se il problema si verifica dopo aver modificato le impostazioni BIOS, riavviare e accedere al BIOS per caricare le impostazioni predefinite. Per ulteriori informazioni, far riferimento al manuale utente della scheda madre

4. Se il problema è causato da un virus nel computer o da un file danneggiati, seguire le istruzioni riportate di seguito:
   a. Accedere al sistema operativo in modalità provvisoria e eseguire una scansione completa del sistema usando un'applicazione antivirus.
   b. Per ulteriore supporto contattare la società del sistema operativo.
   c. Se le informazioni precedenti non sono sufficienti a risolvere il problema, potrebbe essere necessario formattare il disco rigido e installare nuovamente il sistema operativo.

3.2.4 Domande Frequenti

D1: La memoria riportata nel POST è diversa dalla memoria installata.

R1: La differenza di memoria riportata potrebbe essere causata da moduli di memoria difettosi o dall'errata installazione dei moduli di memoria DIMM. Assicurarsi che i moduli DIMM siano in buone condizioni e siano stati installati correttamente. Far riferimento al manuale utente della scheda madre per i dettagli. Se viene installata una memoria da 4.0 GB normalmente viene riportata una memoria da 3.X GB.

D2: Il sistema non riesce a rilevare l'unità disco floppy, ma il led del disco floppy è acceso.

R2: I cavi del disco floppy sono installati in maniera errata. Assicurarsi che la striscia rossa del cavo (l'estremità pin1) sia in corrispondenza del pin1 sull'unità disco floppy.

D3: Impossibile accedere al sistema operativo dopo aver installato il disco flash USB o le unità disco rigido esterno.

R3: Quando il sistema rileva un disco flash USB o un disco rigido a interfaccia USB, potrebbe cambiare la proprietà delle periferiche per l'avvio. Rimuovere le periferiche USB e riavviare il sistema.

D4: Quando viene installato, Windows XP non riesce ad individuare le unità disco rigido installate sul controller RAID.

R4: Windows XP non ha installati i driver per il controller RAID, pertanto le unità disco rigido non possono essere rilevate. Copiare i driver per il controller RAID su un disco floppy e quando si riavvia il sistema con il disco di Windows XP, premere <F6> per leggere il driver dal disco floppy. Far riferimento al manuale utente della scheda madre per ulteriori informazioni.

Capitolo 4: Cura del Computer

4.1 Cura del PC

Il computer è come tutti gli altri elettrodomestici. Tenere il computer lontano da umidità, luce diretta del sole e sorgenti di elettricità statica. Non spostare il computer in caso di danni quando è ancora acceso. La polvere che si crea internamente influenza il funzionamento delle unità disco e contribuisce al surriscaldamento del computer e potrebbe causare l'arresto anomalo o danni alle componenti.

4.2 Nozioni di Base

1. Coprire il computer con coperture anti-polvere quando non viene utilizzato.
2. Durante l'uso del computer, non appoggiare sul monitor oggetti che potrebbero ostruire i fori di ventilazione. Un calore eccessivo potrebbe causare il malfunzionamento del monitor.
3. Non posizionare il computer vicino alle pareti e lasciare spazio per consentire la dissipazione del calore. Il surriscaldamento potrebbe causare un arresto anomalo del sistema.
4. Posizionare il computer su una superficie stabile.
5. Tenere il computer lontano da aree con temperature estreme. La temperatura migliore è tra i 5°C e i 30°C. Usare un condizionatore d'aria o una ventola elettrica per ottimizzare l'area di dissipazione del calore.
6. Sistemare con cura i cavi piatti per garantire un ventilazione ottimale.

4.3 Modalità d'Uso

1. Accendere e spegnere il computer con regolarità. Se è necessario tenere acceso il computer per un lungo periodo, utilizzare una ventola sistema/CPU e un'unità di alimentazione più potenti.
2. Un'improvvisa interruzione dell'alimentazione potrebbe danneggiare il disco rigido. Quando l'alimentazione non è stabile, si consiglia di aggiungere alimentazione continua al computer.
3. Riordinare i file dati, eseguire con regolarità la ricerca di virus e il rinnovo dei codici dei virus e la deframmentazione del disco.
4. Spolverare e pulire il computer con regolarità (scollegare tutti i cavi di alimentazione prima di pulire il computer):
    - Disinstallare la scheda madre e le unità disco rigido/ottico, quindi pulire la scheda con aria compressa o un pennello soffice.
    - Rimuovere la polvere ed eventuali sporcizie dall'unità di alimentazione con un panno antistatico.

4.4 Suggerimenti

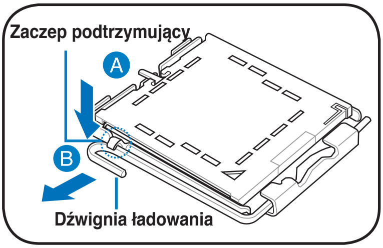
1. Se il computer non viene usato per un lungo periodo di tempo, inserire alcuni sacchetti disidratanti all'interno del telaio per evitare i danni dovuti all'umidità.
2. In alcune aree calde e umide, si consiglia di accendere il computer tutte le settimanne. Questo aiuta anche a prevenire i danni dovuti all'umidità.

Rozdział 1: Szybkie uruchomienie

1.1 Instalacja procesora

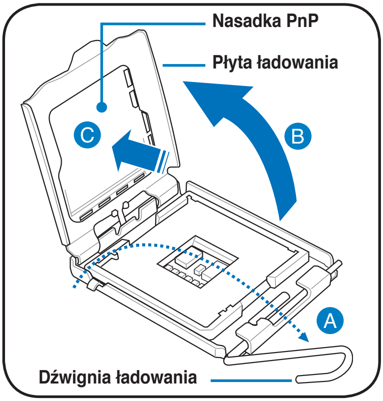
1.1.1 Gniazdo Intel® LGA775

1. Zlokalizuj gniazdo procesora na płycie głównej.
2. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w lewo (B), aż do zwolnienia jej z zaczepu podtrzymującego.

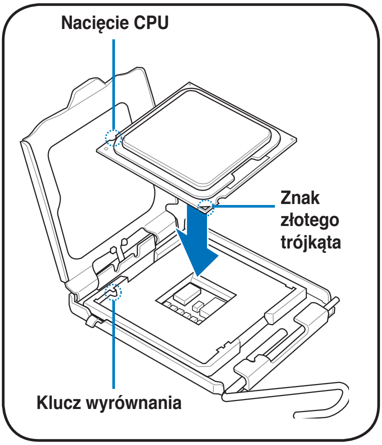

Zaczep podtrzymujący
A
B
Dźwignia ładowania

Aby zapobiec uszkodzeniu pinów w gnieździe złącza nie należy zdejmować nasadki PnP, dopóki nie zostanie zainstalowany CPU.

3. Unieś dźwignię ładowania w kierunku strzałki pod kątem 135º.
4. Unieś kciukiem płytę ładowania i palcem wskazującym do kąta 100º (4A), następnie naciśnij nasadkę PnP z okna płyty ładowania w celu odłączenia (4B).

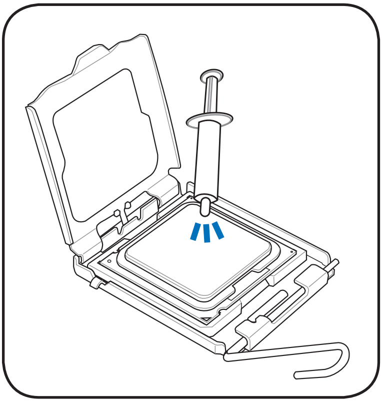

Nasadka PnP
Płyta ładowania
C
B
A
Dźwignia ładowania

5. Ustaw CPU nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym lewym rogu gniazda, a następnie dopasuj klucz wyrównania gniazda do nacięcia CPU.



CPU pasuje wyłącznie w jednym kierunku. NIE należy wkładać na siłę CPU do gniazda!

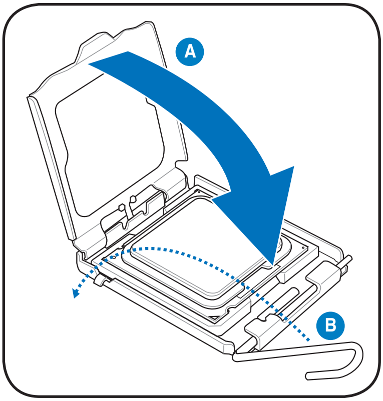
6. Na powierzchnię procesora, która będzie stykała się z radiatorem nałóż trochę pasty termoprzewodzącej, sprawdzając jego równe rozprowadzenie w postaci cienkiej warstwy.



Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

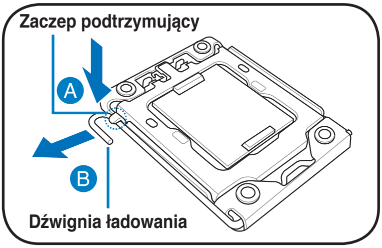
7. Zamknij płytę ładowania (A), a następnie naciśnij dźwignię ładowania (B), aż do zatrzaśnięcia w zaczepie podtrzymującym.



1.1.2 Gniazdo Intel® LGA1366

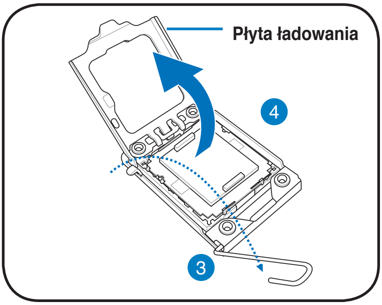
1. Odszukaj gniazdo CPU na płycie głównej.

2. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w lewo (B), aż do zwolnienia jej z zaczepu podtrzymującego.

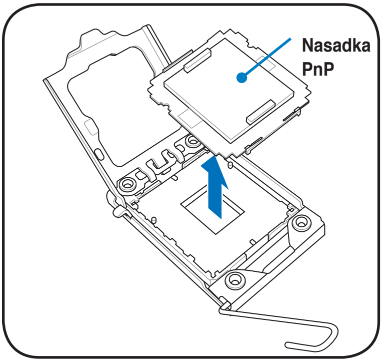

Zaczep podtrzymujący
A
B
Dźwignia ładowania

Aby zapobiec uszkodzeniu pinów w gnieździe złącza nie należy zdejmować nasadki PnP, dopóki nie zostanie zainstalowany CPU.

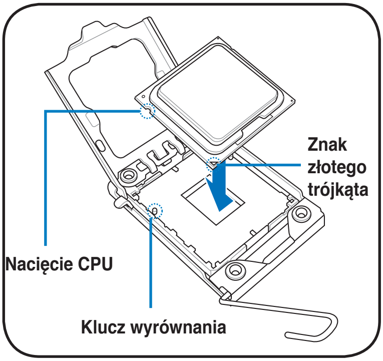
3. Unieś dźwignię ładowania w kierunku strzałki pod kątem 135º.
4. Unieś kciukiem płytę ładowania i palcem wskazującym do kąta 100º.


Płyta ładowania
4
3

5. Zdejmij nasadkę PnP z gniazda CPU.

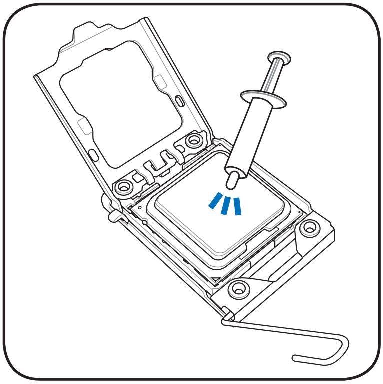

Nasadka PnP

6. Ustaw CPU nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym lewym rogu gniazda, a następnie dopasuj klucz wyrównania gniazda do nacięcia CPU.



CPU pasuje wyłącznie w jednym kierunku. NIE należy wkładać na siłę CPU do gniazda!

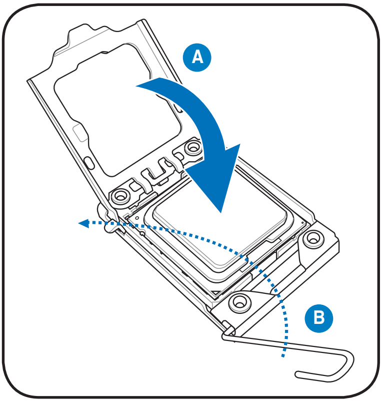
7. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jego równe rozprowadzenie w postaci cienkiej warstwy.



Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

8. Zamknij płytę ładowania (A), a następnie naciśnij dźwignię ładowania (B), aż do zatrzaśnięcia w zaczepie podtrzymującym.

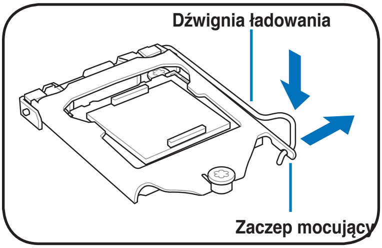


1.1.3 Gniazdo Intel® LGA1156

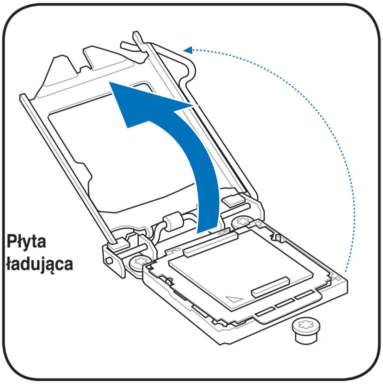
Procesor LGA1155 jest zgodny z gniazdem LGA1156. NIE należy instalować procesora LGA1155 w gnieździe LGA1156.

1. Zlokalizuj gniazdo procesora na płycie głównej.
2. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w prawo (B), aż do zwolnienia z zaczepu mocującego.

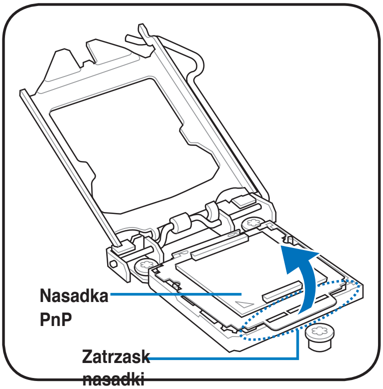
Aby zapobiec uszkodzeniu pinów w gnieździe złącza nie należy zdejmować nasadki PnP, dopóki nie zostanie zainstalowany procesor.


Dźwignia ładowania
Zaczep mocujący

3. Unieś dźwignię ładowania w kierunku strzałki, aż do całkowitego podniesienia płyty ładującej.

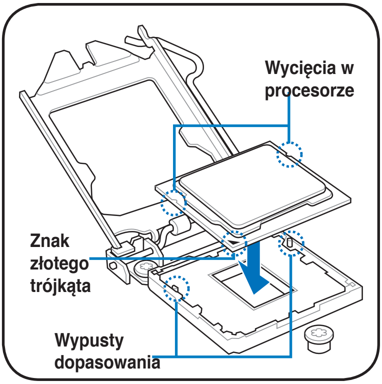

Płyta ładująca

4. Zdejmij nasadkę PnP z gniazda procesora, podnosząc jedynie zaczep.


Nasadka PnP
Zatrzask nasadki

5. Ustaw procesor nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym-lewym rogu gniazda, a następnie dopasuj wypusty dopasowania do wycięć w procesorze.

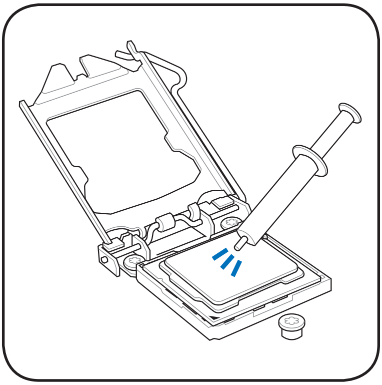
Procesor pasuje jedynie w jednej, prawidłowej orientacji. NIE należy wkładać procesora na siłę do gniazda, aby nie wygiąć pinów w gnieździe i nie uszkodzić procesora!



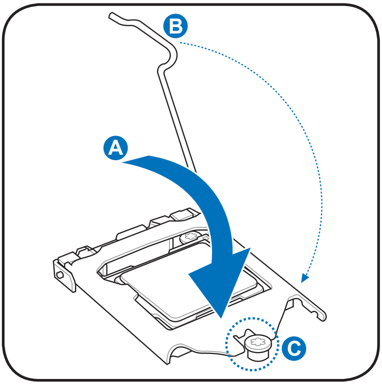
6. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.

Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

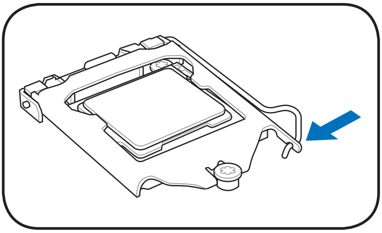
Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.



7. Zamknij płytę ładowania (A), a następnie naciśnij dźwignię ładowania (B), upewniając się, że przednia krawędź płyty ładowania jest wsunięta pod pod zamknięcie mocujące (C).



8. Wstaw dźwignię ładowania pod zaczep mocujący.

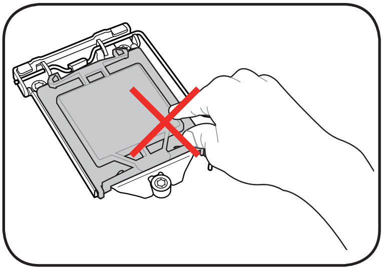


1.1.4 Gniazdo Intel® LGA1155 (Nasadka PnP na płycie ładowania)

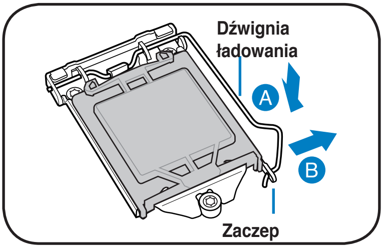
Procesor LGA1156 jest zgodny z gniazdem LGA1155. NIE należy instalować procesora LGA1156 w gnieździe LGA1155.

1. Zlokalizuj gniazdo procesora na płycie głównej.

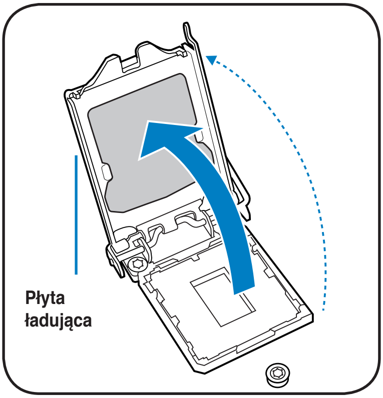
2. Przed instalacją CPU należy zdjąć nasadkę PnP z gniazda CPU.



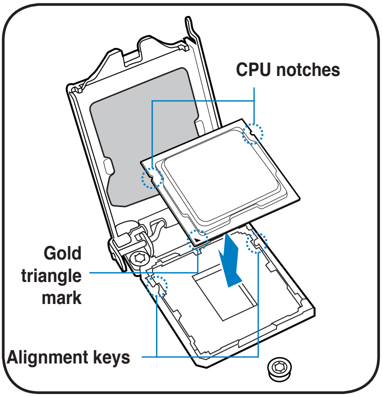
3. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w prawo (B), aż do zwolnienia z zaczepu mocującego.



4. Unieś dźwignię ładowania w kierunku strzałki, aż do całkowitego podniesienia płyty ładującej.

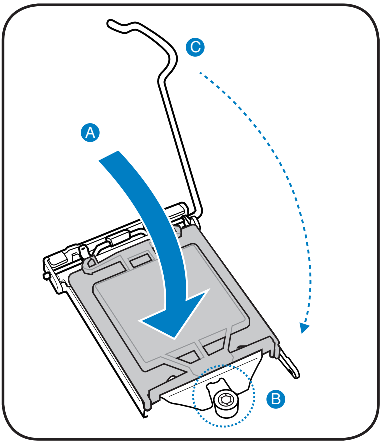


5. Ustaw procesor nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym-lewym rogu gniazda, a następnie dopasuj wypusty dopasowania do wycięć w procesorze.

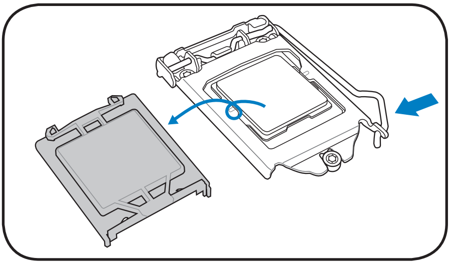


Procesor pasuje jedynie w jednej, prawidłowej orientacji. NIE należy wkładać procesora na siłę do gniazda, aby nie wygiąć pinów w gnieździe i nie uszkodzić procesora!

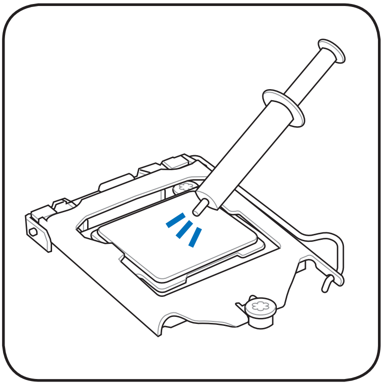
6. Zamknij płytę ładowania (A), upewniając się, że przednia krawędź płyty ładowania jest wsunięta pod zamknięcie (B). Następnie naciśnij dźwignię ładowania (C).



7. Wstaw dźwignię ładowania pod występem podtrzymywania, aby zdjąć nasadkę PnP z gniazda CPU.



8. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



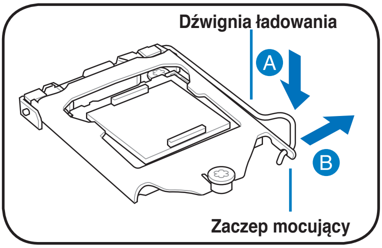
Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

1.1.5 Gniazdo Intel® LGA1155 (Nasadka PnP pod płytą ładowania)

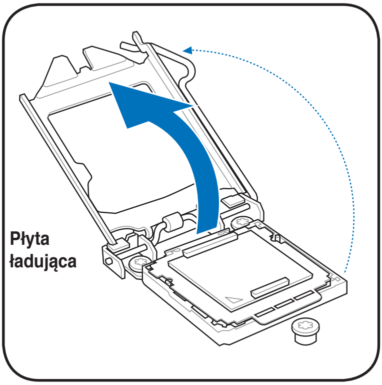
Procesor LGA1156 jest zgodny z gniazdem LGA1155. NIE należy instalować procesora LGA1156 w gnieździe LGA1155.

1. Zlokalizuj gniazdo procesora na płycie głównej.
2. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w prawo (B), aż do zwolnienia z zaczepu mocującego.

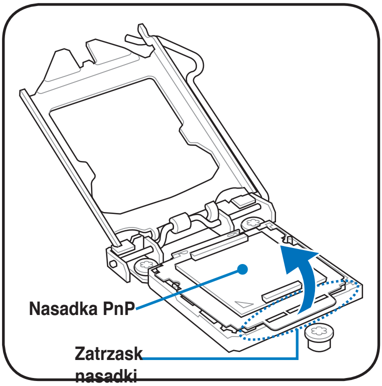

Dźwignia ładowania
A
B
Zaczep mocujący

Aby zapobiec uszkodzeniu pinów w gnieździe złącza nie należy zdejmować nasadki PnP, dopóki nie zostanie zainstalowany procesor.

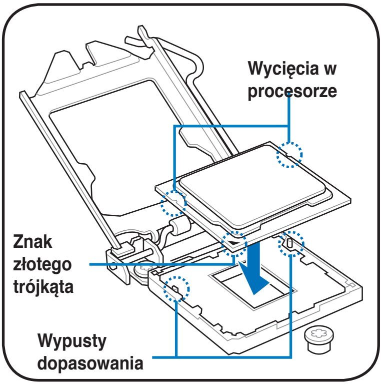
3. Unieś dźwignię ładowania w kierunku strzałki, aż do całkowitego podniesienia płyty ładującej.


Płyta ładująca

4. Zdejmij nasadkę PnP z gniazda procesora, podnosząc jedynie zaczep.

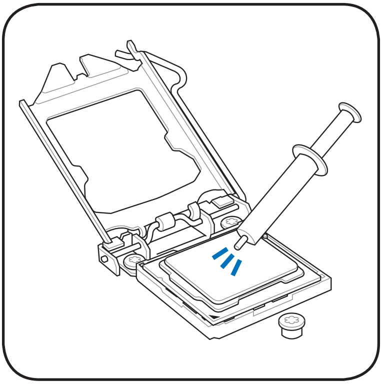

Nasadka PnP
Zatrzask nasadki

5. Ustaw procesor nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym-lewym rogu gniazda, a następnie dopasuj wypusty dopasowania do wycięć w procesorze.



Procesor pasuje jedynie w jednej, prawidłowej orientacji. NIE należy wkładać procesora na siłę do gniazda, aby nie wygiąć pinów w gnieździe i nie uszkodzić procesora!

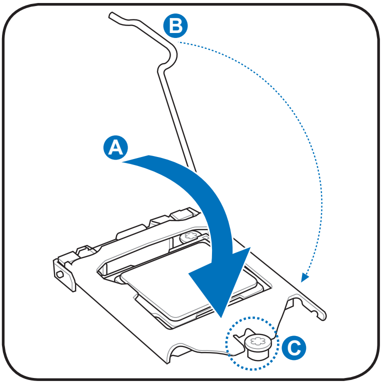
6. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



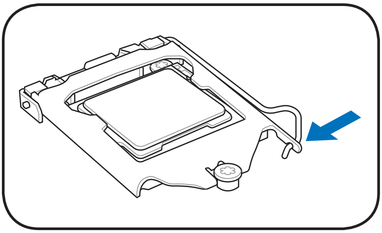
Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

7. Zamknij płytę ładowania (A), a następnie naciśnij dźwignię ładowania (B), upewniając się, że przednia krawędź płyty ładowania jest wsunięta pod pod zamknięcie mocujące (C).

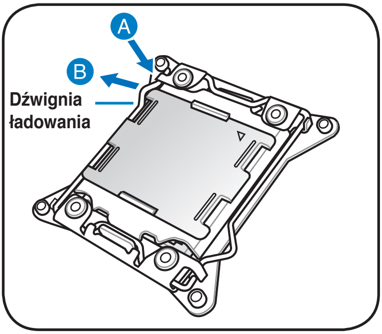


8. Wstaw dźwignię ładowania pod zaczep mocujący.



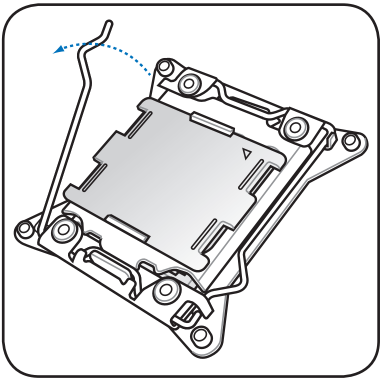
1.1.6 Gniazdo Intel® LGA2011

1. Odszukaj gniazdo CPU na płycie głównej.
2. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w lewo (B), aż do zwolnienia jej z zaczepu podtrzymującego.

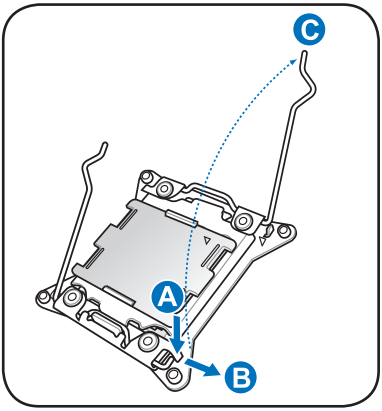


Aby zapobiec uszkodzeniu pinów w gnieździe złącza nie należy zdejmować nasadki PnP, dopóki nie zostanie zainstalowany CPU.

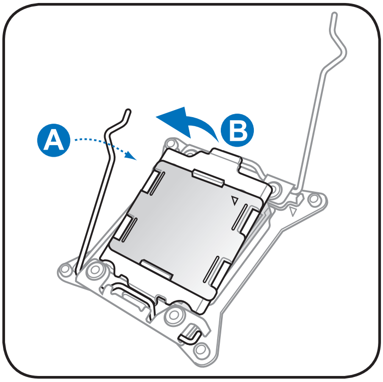
3. Lekko unieś dźwignię ładowania w kierunku strzałki.



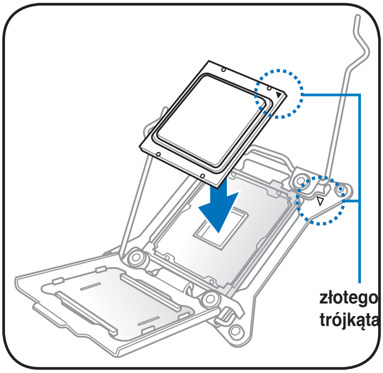
4. Zamknij płytę ładowania (A), a następnie naciśnij dźwignię ładowania (B), upewniając się, że przednia krawędź płyty ładowania jest wsunięta pod pod zamknięcie mocujące (C). Lekko unieś dźwignię ładowania w kierunku strzałki (C).



5. Naciśnij lewą dźwignię ładowania (A), aby unieść ładowaną płytkę (B).

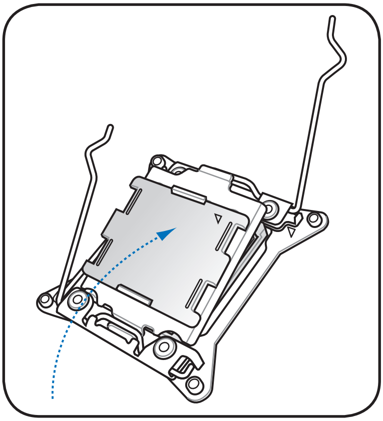


6. Ustaw CPU nad gniazdem, sprawdzając, czy znak trójkąta znajduje się nad prawym, górnym rogiem gniazda.

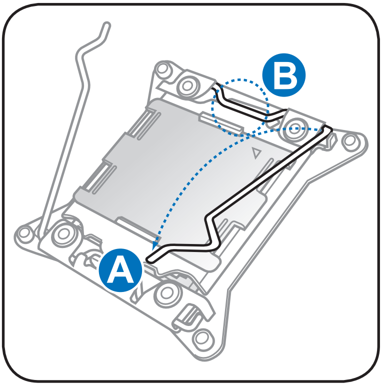


CPU pasuje wyłącznie w jednym kierunku. NIE należy wkładać na siłę CPU do gniazda!

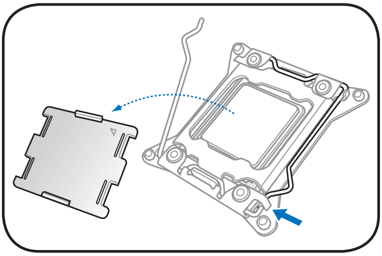
7. Zamknij tablicy obciążeń.



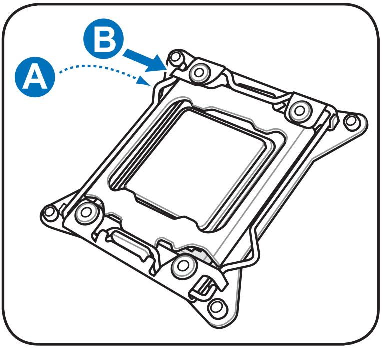
8. Naciśnij prawą dźwignię ładowania (A), sprawdzając, czy krawędź płyty ładowania jest przymocowana dźwignią (B).



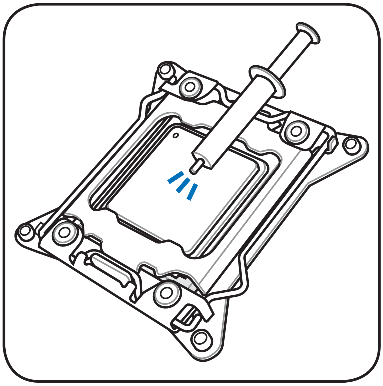
9. Wsuń prawą dźwignię ładowania pod zaczep podtrzymujący. Zdejmij nasadkę PnP z gniazda CPU.



10. Naciśnij lewą dźwignię ładowania (A), a następnie wsuń dźwignię pod zaczep podtrzymujący (B).



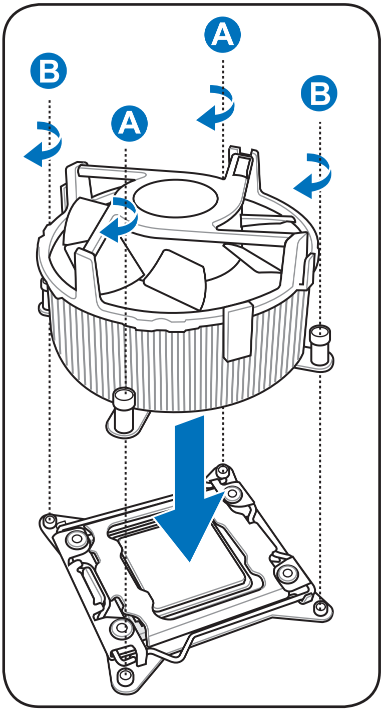
11. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



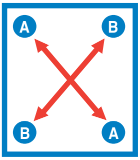
Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

12. Umieść radiator na zainstalowanym CPU, sprawdzając dopasowanie czterech elementów mocujących do otworów gniazda CPU.
13. Wkręć każdą z czterech śrub śrubokrętem gwiazdkowym (krzyżakowym) na tyle, aby przymocować radiator do gniazda CPU. Po wkręceniu czterech śrub, dokręć je, aby całkowicie zamocować radiator.



Dokręć cztery śruby radiatora po przekątnej.

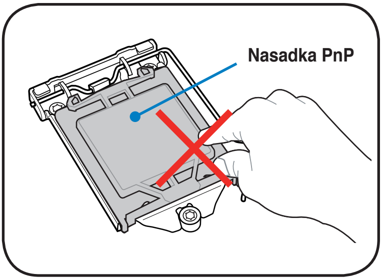


1.1.7 Gniazdo Intel® LGA1150 (Nasadka PnP na płycie ładowania)

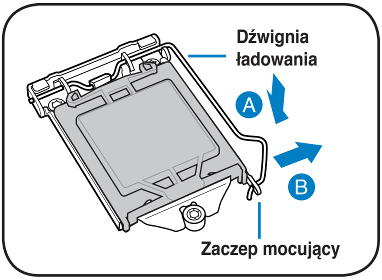
Upewnij się, że instalowany jest właściwy procesor, przeznaczony wyłącznie dla LGA1150. NIE należy instalować w gnieździe LGA1150 procesora przeznaczonego do gniazd LGA1155 i LGA1156.

1. Zlokalizuj gniazdo procesora na płycie głównej.

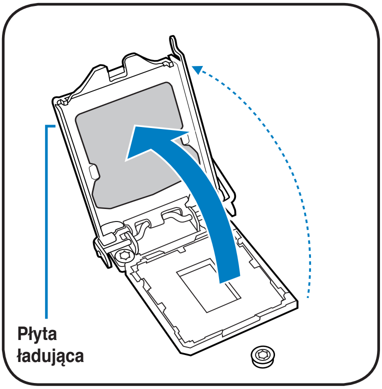
NIE należy usuwać nasadki PnP z gniazda procesora. Może to spowodować wygięcie szpilek gniazda. Sprawdź na ilustracji poniżej lokalizację nasadki PnP.



2. Unieś dźwignię ładowania w kierunku strzałki, aż do całkowitego podniesienia płyty ładującej.

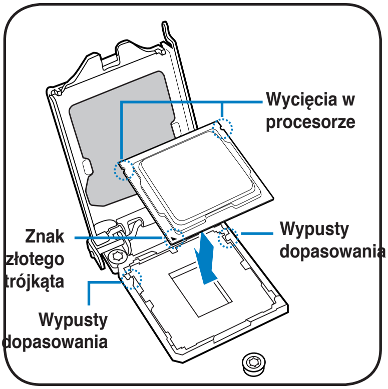


3. Unieś dźwignię ładowania w kierunku strzałki, aż do całkowitego podniesienia płyty ładującej.

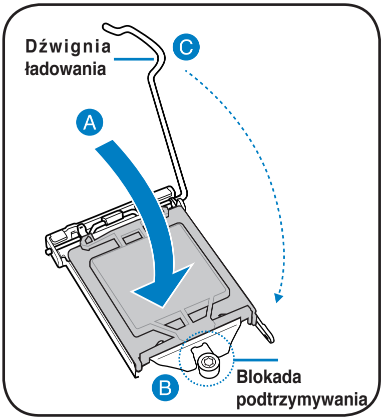


4. Ustaw procesor nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym-lewym rogu gniazda, następnie należy dopasować wycięcia procesora do wypustów gniazda.

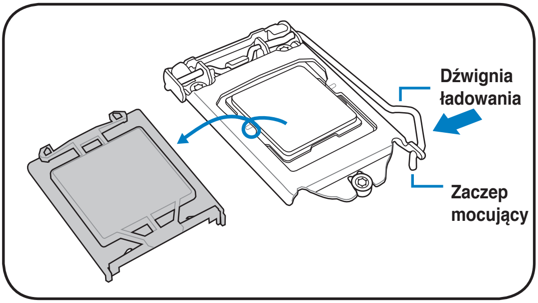
Procesor pasuje jedynie w jednej, prawidłowej orientacji. NIE należy wkładać procesora na siłę do gniazda, aby nie wygiąć pinów w gnieździe i nie uszkodzić procesora!


Wycięcia w procesorze
Znak złotego trójkąta
Wypusty dopasowania
Wypusty dopasowania

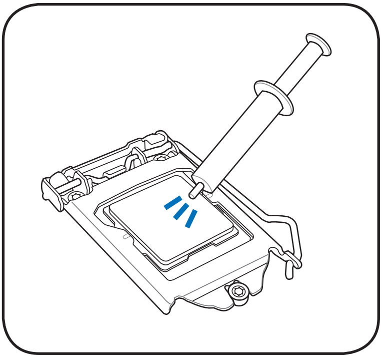
5. Zamknij płytę ładowania (A), upewniając się, że przednia krawędź płyty ładowania jest wsunięta pod zamknięcie (B). Następnie naciśnij dźwignię ładowania (C).


Dźwignia ładowania
C
A
B
Blokada podtrzymywania

6. Wstaw dźwignię ładowania pod występem podtrzymywania, aby zdjąć nasadkę PnP z gniazda CPU.


Dźwignia ładowania
Zaczep mocujący

7. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



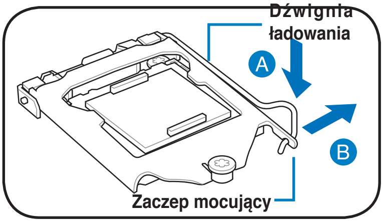
Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

1.1.8 Gniazdo Intel® LGA1150 (Nasadka PnP pod płytą ładowania)

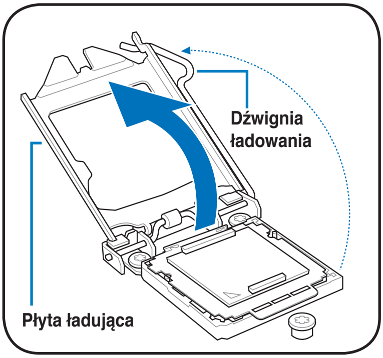
Upewnij się, że instalowany jest właściwy procesor, przeznaczony wyłącznie dla LGA1150. NIE należy instalować w gnieździe LGA1150 procesora przeznaczonego do gniazd LGA1155 i LGA1156.

1. Zlokalizuj gniazdo procesora na płycie głównej.
2. Naciśnij kciukiem (A) dźwignię ładowania, a następnie przesuń ją w prawo (B), aż do zwolnienia z zaczepu mocującego.

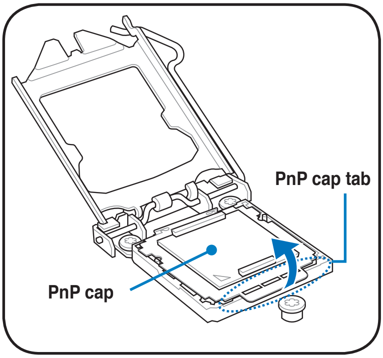

Dźwignia ładowania
A
B
Zaczep mocujący

NIE należy usuwać nasadki PnP z gniazda procesora. Może to spowodować wygięcie szpilek gniazda.

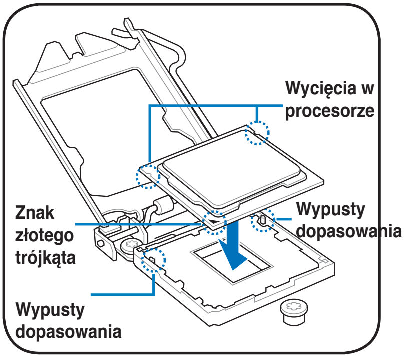
3. Unieś dźwignię ładowania w kierunku strzałki, aż do całkowitego podniesienia płyty ładującej.


Dźwignia ładowania
Płyta ładująca

4. Zdejmij nasadkę PnP z gniazda procesora, podnosząc jedynie zaczep.

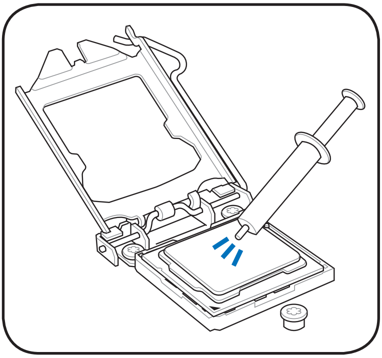

PnP cap tab
PnP cap

5. Ustaw procesor nad gniazdem, upewniając się, że znak złotego trójkąta znajduje się w dolnym-lewym rogu gniazda, następnie należy dopasować wycięcia procesora do wypustów gniazda.


Wycięcia w procesorze
Znak złotego trójkąta
Wypusty dopasowania
Wypusty dopasowania

Procesor pasuje jedynie w jednej, prawidłowej orientacji. NIE należy wkładać procesora na siłę do gniazda, aby nie wygiąć pinów w gnieździe i nie uszkodzić procesora!

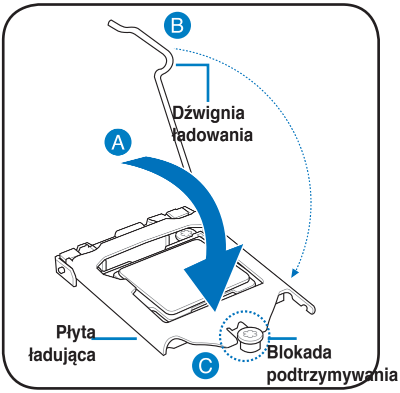
6. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



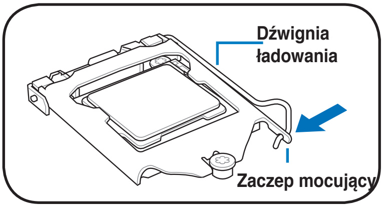
Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej skóry należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

7. Zamknij płytę ładowania (A), a następnie naciśnij dźwignię ładowania (B), upewniając się, że przednia krawędź płyty ładowania jest wsunięta pod pod zamknięcie mocujące (C).


B
Dźwignia ładowania
A
Płyta ładująca
C
Blokada podtrzymywania

8. Wstaw dźwignię ładowania pod zaczep mocujący.

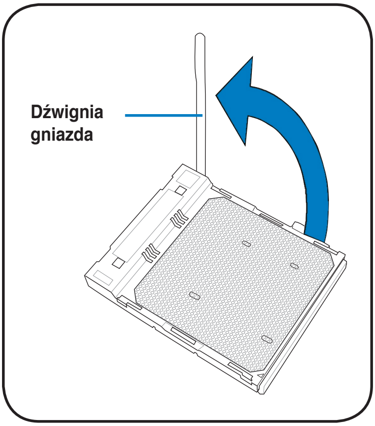

Dźwignia ładowania
Zaczep mocujący

1.1.9 Gniazdo AMD AM2 / AM2+ / AM3

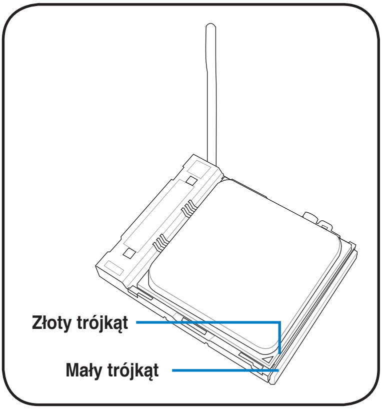
- Gniazda AMD AM2 i AM2+ są zgodne z procesorami AMD AM2, AM2+ oraz AM3.
- Gniazdo AMD AM3 jest zgodne z procesorami AMD AM3. NIE należy instalować procesora AMD AM2+ / AM2 w gnieździe AM3. Niektóre modele płyt głównych AM3 po aktualizacji BIOS obsługują procesory AM3+. Szczegółowe informacje można sprawdzić na stronie pomocy technicznej ASUS.

1. Odszukaj gniazdo CPU na płycie głównej.
2. Naciśnij dźwignię na boku, aby odblokować gniazdo, a następnie unieś ją w górę pod kątem 90º.

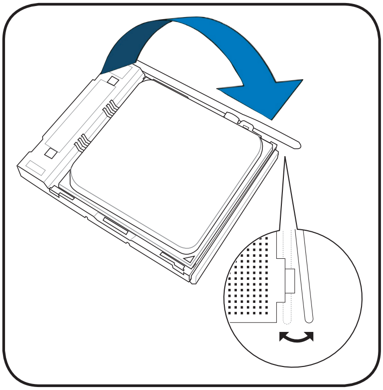
Upewnij się, że dźwignia gniazda jest uniesiona pod katem 90º. W przeciwnym razie, nie będzie można całkowicie dopasować CPU.



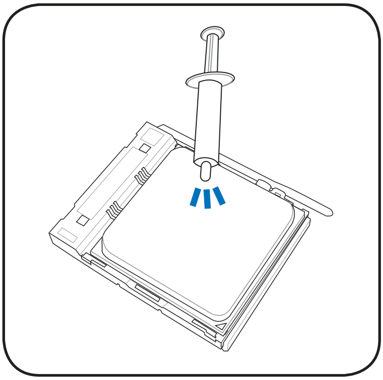
3. Ustaw CPU nad gniazdem w taki sposób, aby róg CPU ze złotym trójkątem był dopasowany do rogu gniazda z małym trójkątem.
4. Ostrożnie włóż CPU do gniazda, aż do pełnego dopasowania.



5. Po dopasowaniu CPU, dociśnij dźwignię gniazda, aby zabezpieczyć CPU. Kliknięcie dźwigni w zaczepie bocznym oznacza zabezpieczenie.



6. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

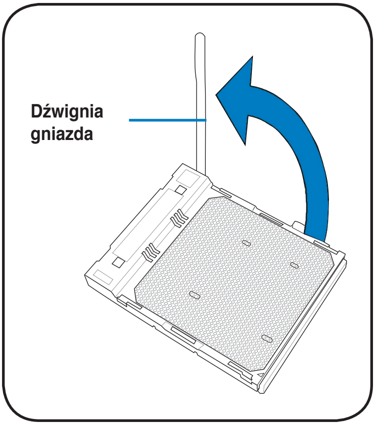
Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

1.1.10 Gniazdo AMD AM3+

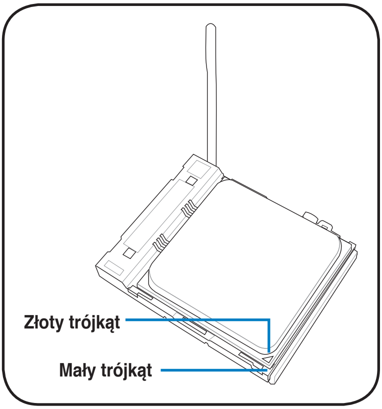
Gniazdo AMD AM3+ jest zgodne z procesorami AMD AM3+ i AM3. Niektóre modele płyt głównych AM3 po aktualizacji BIOS obsługują procesory AM3+. Szczegółowe informacje można sprawdzić na stronie pomocy technicznej ASUS.

1. Odszukaj gniazdo CPU na płycie głównej.
2. Naciśnij dźwignię na boku, aby odblokować gniazdo, a następnie unieś ją w górę pod kątem 90º.

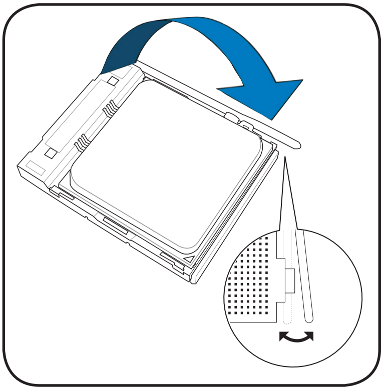
Upewnij się, że dźwignia gniazda jest uniesiona pod katem 90º. W przeciwnym razie, nie będzie można całkowicie dopasować CPU.



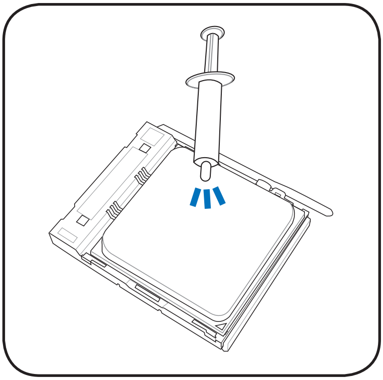
3. Ustaw CPU nad gniazdem w taki sposób, aby róg CPU ze złotym trójkątem był dopasowany do rogu gniazda z małym trójkątem.
4. Ostrożnie włóż CPU do gniazda, aż do pełnego dopasowania.



5. Po dopasowaniu CPU, dociśnij dźwignię gniazda, aby zabezpieczyć CPU. Kliknięcie dźwigni w zaczepie bocznym oznacza zabezpieczenie.



6. Nałóż na powierzchnię procesora, która będzie stykała się z radiatorem trochę pasty termoprzewodzącej, sprawdzając jej równe rozprowadzenie w postaci cienkiej warstwy.



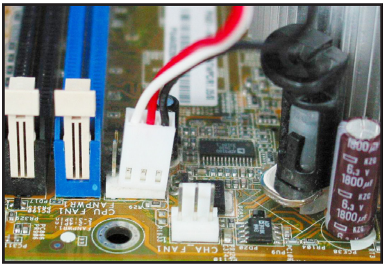
Niektóre radiatory są dostarczane z wstępnie nałożoną pastą termoprzewodzącą. Jeśli tak jest w danym przypadku należy pominąć ten krok.

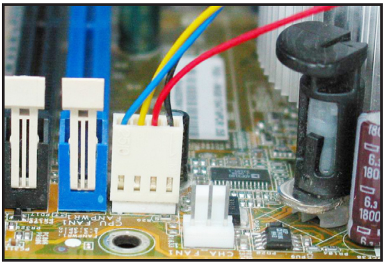
Pasta termoprzewodząca jest toksyczna i niejadalna. NIE wolno jej połykać. Jeśli dostanie się do oczu lub dotknie uszkodzonej należy to miejsce natychmiast przemyć i zgłosić się do lekarza.

1.2 Instalacja radiatora i wentylatora

W celu instalacji radiatora i wentylatora procesora:

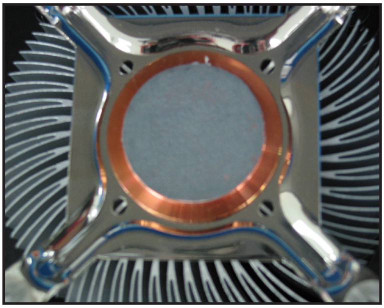
1. Wybierz zestaw radiatora i wentylatora z certyfikatem Intela lub AMD, w zależności od posiadanej płyty głównej. Na płycie znajduje się 3-pinowe (zdjęcie lewe) i 4-pinowe (zdjęcie prawe) złącze wentylatora. Technologię ASUS Q-Fan obsługują wyłącznie wentylatory procesora ze złączami 4-pinowymi.





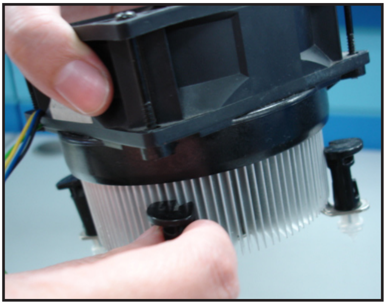
Radiatory z certyfikatem Intel:

2. Niektóre radiatory dostarczane są z wstępnie naniesioną pastą przewodzącą ciepło. W takim przypadku nie należy jej zeskrobywać usuwają warstwę ochronną przed instalacją procesora. Przy braku pasty, przed instalacją radiatora należy nanieść kilka kropli pasty przewodzącej ciepło na powierzchnie styku procesora i radiatora. Upewnij się, że pasta jest nałożona w postaci równej, cienkiej warstwy.

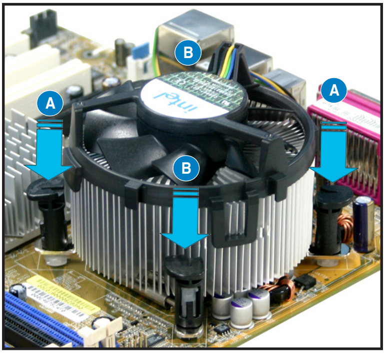


Aby zapobiec zanieczyszczeniu pasty, NIE należy jej rozpościerać palcem.

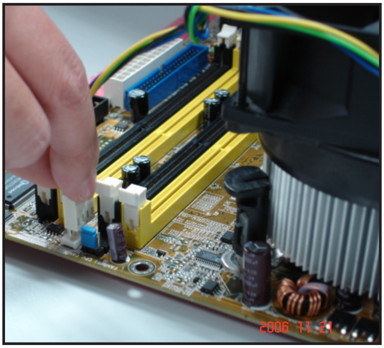
3. Ustaw każdy z kołków mocujących odsuwając grot strzałki o 90st na zewnątrz.



4. Naciśnij jednocześnie dwa kołki mocujące po przekątnej w celu zamocowania zestawu radiatora i wentylatora.



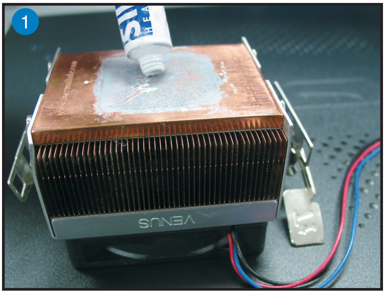
5. Podłącz kabel wentylatora procesora do odpowiedniego złącza na płycie głównej.

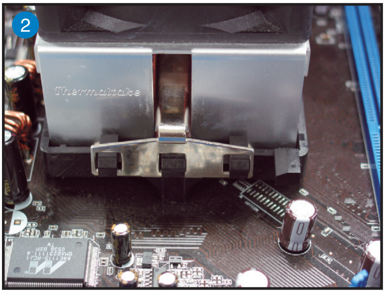


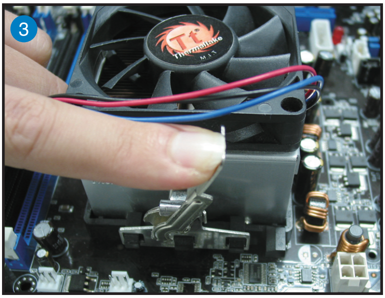
NALEŻY pamiętać o podłączeniu złącza wentylatora procesora! Nie podłączenie złącza może spowodować pojawienie się błędów sprzętowych monitorowania, dla uzyskania maksymalnej powierzchni rozpraszania ciepła, zaleca się stosowanie wielokierunkowego radiatora.

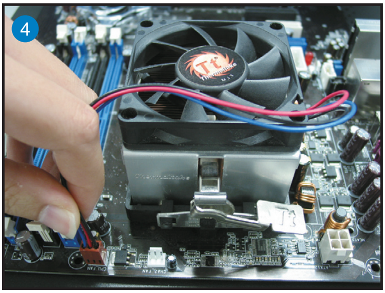
Radiatory z certyfikatem AMD:

Wykonaj podane poniżej instrukcje w celu instalacji radiatora z certyfikatem AMD.







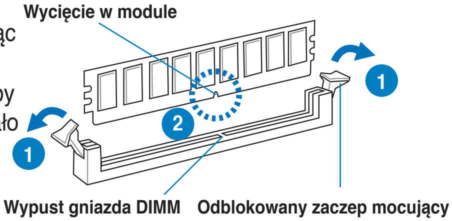


1.3 Instalacja DIMM

Przed dodaniem lub odłączeniem modułów DIMM lub innych komponentów systemu należy upewnić się, że odłączony został zasilacz. Niezastosowanie się do tego zalecenia może spowodować poważne uszkodzenie płyty głównej i komponentów.

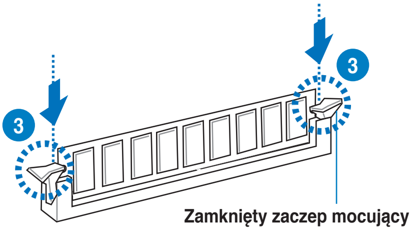
Instalacja modułu DIMM w gnieździe DIMM z dwoma zaczepami

1. Odblokuj gniazdo DIMM naciskając do zewnątrz zaczepy mocujące.
2. Dopasuj DIMM do gniazda tak, aby wycięcie w module DIMM pasowało do wypustu gniazda DIMM.



Moduł pamięci DIMM posiada nacięcie i pasuje wyłącznie w jednym kierunku. NIE WOLNO wpychać na siłę modułu DIMM do gniazda w złym kierunku!

3. Uchwyć moduł DIMM za obydwa końce, a następnie wstaw pionowo do gniazda. W celu zapewnienia prawidłowego montażu modułu DIMM, naciśnij jednocześnie obydwa końce modułu DIMM, aż zaskoczą na miejsce obydwa zatrzaski mocujące.

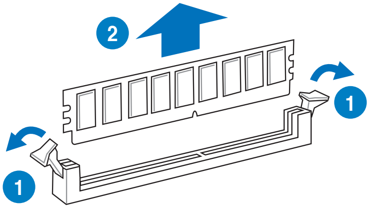


Aby zapobiec uszkodzeniu wycięcia w module DIMM bądź samego gniazda modułu, moduł DIMM należy zawsze wstawiać do gniazda PIONOWO.

- Aby zainstalować dwa lub więcej modułów DIMM należy sprawdzić instrukcję użytkownika znajdującą się w opakowaniu z płytą główną.
- Sprawdź instrukcję użytkownika w celu odszukania listy kwalifikowanych producentów modułów pamięci.

Wyjmowanie modułu DIMM z gniazda DIMM z dwoma zatrzaskami

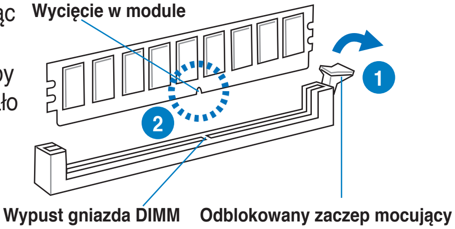
1. Jednocześnie naciśnij obydwa zatrzaski mocujące na zewnątrz, aby odblokować moduł DIMM.
2. Wyjmij moduł DIMM z gniazda.



Podczas naciskania zaczepów mocujących, lekko przytrzymaj moduł DIMM palcami. Wyrzucenie modułu DIMM z dużą siłą, może spowodować jego uszkodzenie.

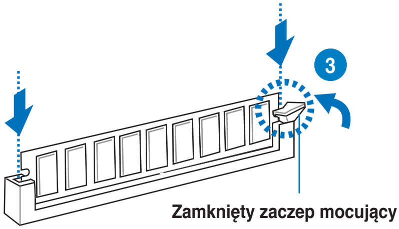
Instalacja modułu DIMM w gnieździe DIMM z pojedynczym zaczepem

1. Odblokuj gniazdo DIMM naciskając do zewnątrz zaczep mocujący.
2. Dopasuj DIMM do gniazda tak, aby wycięcie w module DIMM pasowało do wypustu gniazda DIMM.



Moduł pamięci DIMM posiada nacięcie i pasuje wyłącznie w jednym kierunku. NIE należy wpychać na siłę modułu DIMM do gniazda w złym kierunku!

3. Uchwyć moduł DIMM za obydwa końce, a następnie wstaw moduł DIMM pionowo do gniazda. W celu zapewnienia prawidłowego ustawienia modułu DIMM, naciśnij jednocześnie obydwa końce modułu DIMM, aż zaskoczy na miejsce zaczep mocujący i nie będzie już można bardziej docisnąć modułu DIMM.

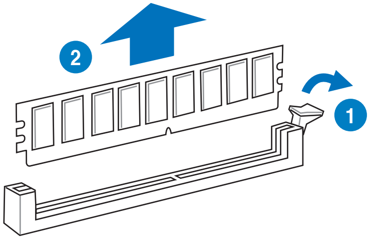


Aby zapobiec uszkodzeniu wycięcia w module DIMM, moduł DIMM należy zawsze wstawiać do gniazda PIONOWO.

- Aby zainstalować dwa lub więcej modułów DIMM należy sprawdzić instrukcję użytkownika znajdującą się w opakowaniu z płytą główną.
- Sprawdź instrukcję użytkownika w celu odszukania listy kwalifikowanych producentów modułów pamięci.

Wyjmowanie modułu DIMM z gniazda DIMM z pojedynczym zatrzaskiem zatraskiem

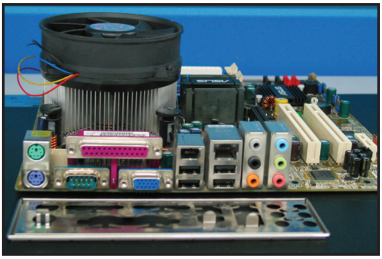
1. Naciśnij zatrzask mocujący na zewnątrz, aby odblokować moduł DIMM.
2. Wyjmij moduł DIMM z gniazda.



Podczas naciskania zaczepu mocującego, lekko przytrzymaj moduł DIMM palcami. Wyrzucenie modułu DIMM z dużą siłą, może spowodować jego uszkodzenie.

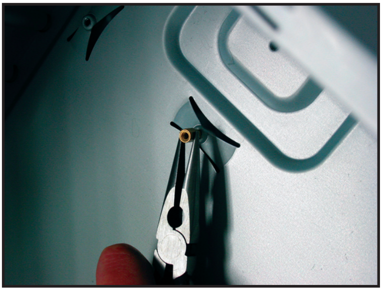
1.4 Instalacja płyty głównej

1. Porty I/O różnią się w zależności płyty głównej. Należy użyć wyłącznie i tylną osłonę I/O dostarczaną w pakiecie z płytą główną.

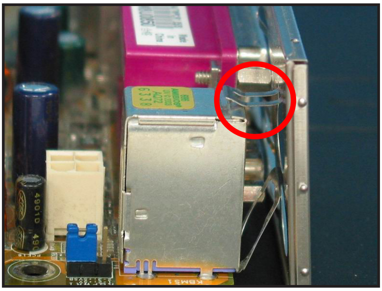


Niektóre ostre krawędzie i punkty mogą spowodować obrażenia fizyczne. Przed instalacją płyty głównej i osłony I/O zaleca się nałożenie rękawic ochronnych zabezpieczających przed nacięciem lub nakłuciem.

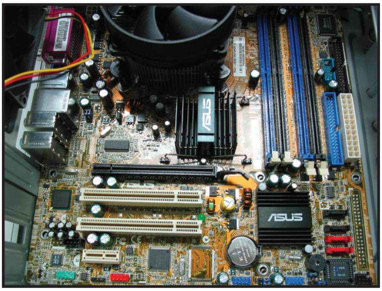
2. Zainstaluj wsporniki w oznaczonych otworach metalowej płyty.



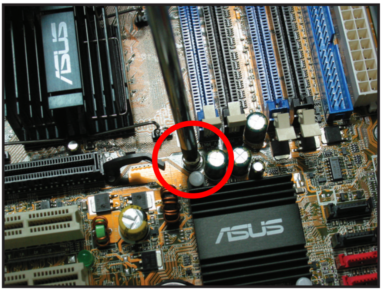
3. Sprężynowanie krawędzi osłony I/O może uszkodzić porty I/O. Podczas instalacji osłony I/O należy zachować ostrożność.



4. Ustaw stronę I/O płyty głównej w kierunku tyłu obudowy i wstaw płytę główną do obudowy.



5. Włóż i luźno przykręć każdą ze śrub po przekątnej. Po włożeniu wszystkich śrub, dokręć je, aż do momentu, kiedy ciężko będzie je obrócić palcami.



- Przed instalacją kart rozszerzenia z tyłu płyty głównej, należy odłączyć odpowiednie metalowe zaślepki gniazd kart rozszerzenia.
- NIE należy nadmiernie mocno dokręcać śrub. Może to spowodować uszkodzenie płyty głównej.

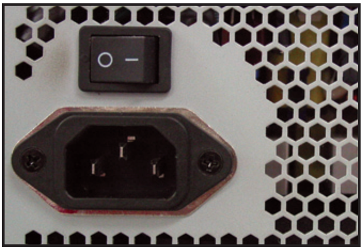
1.5 Instalacja zasilacza

Dostępne są dwa rodzaje powszechnie stosowanych zasilaczy. Jeden z aktywną funkcją PFC (Power Factor Correction [Korekcja współczynnika mocy]), a drugi z pasywną funkcją PFC

1. Wybierz moduł zasilacza.

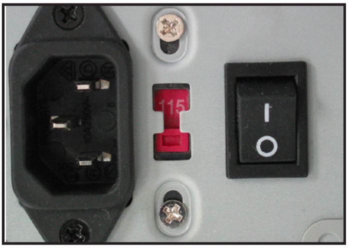
Zasilacz z aktywną funkcją PFC:

Aktywna funkcja PFC wykonuje automatyczną korekcję napięcia wejścia prądu zmiennego.

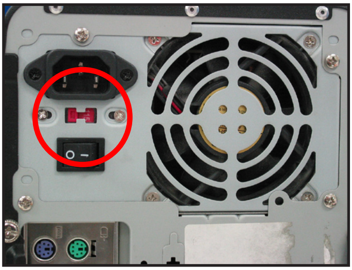


Zasilacz z pasywną funkcją PFC:

Pasywna funkcja PFC wymaga ręcznego ustawienia przez użytkownika napięcia wejścia prądu zmiennego



2. Jeśli wykorzystywany jest zasilacz z pasywną funkcją PFC należy wykonać regulację do prawidłowej wartości napięcia wejścia prądu zmiennego, stosowanej w danej lokalizacji.



Niewykonanie regulacji zasilacza na prawidłową wartość napięcia wejścia prądu zmiennego, spowoduje poważne uszkodzenie sprzętu.

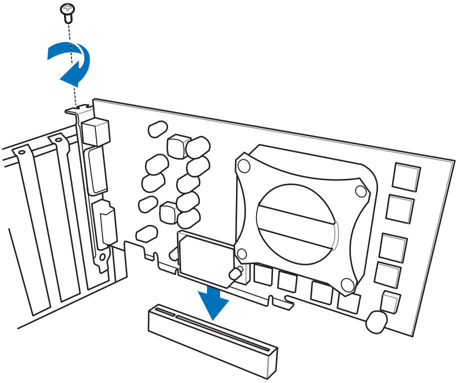
Zaleca się korzystanie wyłącznie zasilaczy z certyfikatem bezpieczeństwa. Używanie niestabilnych zasilaczy może spowodować uszkodzenie płyty głównej i innych komponentów. Sprawdź w podręczniku użytkownika informacje o zasilaczach, które spełniają wymagania płyty głównej.

1.6 Instalacja karty rozszerzenia

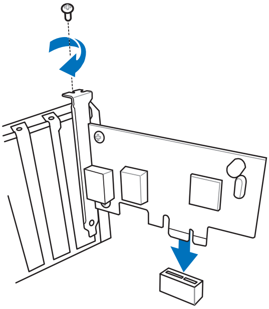
W celu instalacji karty rozszerzenia:

1. Usuń metalową zaślepkę naprzeciw gniazda, gdzie instalowana będzie karta rozszerzenia.
2. Zainstaluj kartę rozszerzenia i upewnij się, że jest prawidłowo osadzona w gnieździe.
3. Dokręć śrubę w celu zamocowania karty w gnieździe.
4. Powtórz poprzednie czynności w celu instalacji innej karty rozszerzenia.

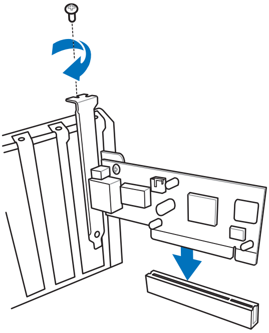
Karta PCIE x16



Karta PCIE x1



Karta PCI



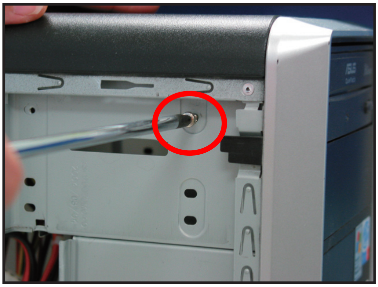
- Jeśli po zainstalowaniu karty rozszerzenia wymagana będzie konfiguracja zworek należy sprawdzić dokumentację karty i podręcznik użytkownika płyty głównej w celu uzyskania szczegółowych informacji dotyczących jej konfiguracji.
- Sprawdź podręcznik użytkownika płyty głównej w celu uzyskania instrukcji podłączenia kabla sygnałowego karty rozszerzenia.

1.7 Instalacja napędów dyskowych

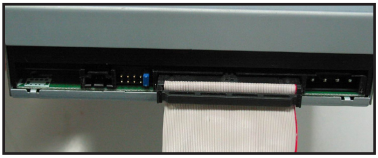
1.7.1 Napęd optyczny PATA

1. Zdejmij, atrapę zatoki dla napędu i wsuń napęd optyczny do wnęki.

2. Dopasuj otwory na śruby i zamocuj napęd śrubami.

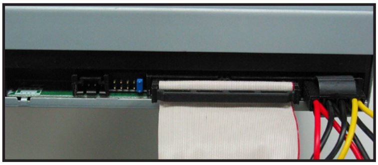


3. Ustaw we właściwym kierunku i podłącz do napędu optycznego kabel IDE. Czerwony pasek na kablu IDE odpowiada pinowi 1 powinien pasować do oznaczenia Pin1 napędu optycznego.

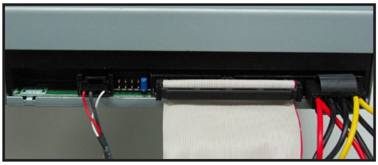


Kable IDE są zabezpieczone przed nieprawidłowym podłączeniem. Nigdy nie należy wkładać kabla IDE do złącza na siłę.

4. Podłącz 4-pinowy kabel zasilający do napędu optycznego.



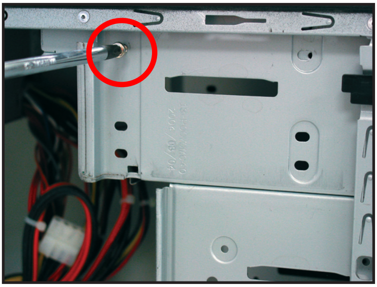
5. Podłącz kabel audio do złącza napędu optycznego.



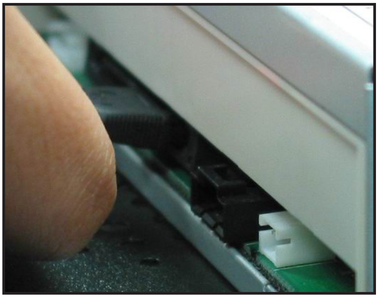
1.7.2 Napęd optyczny SATA

1. Zdejmij, atrapę zatoki dla napędu i wsuń napęd optyczny do wnęki.

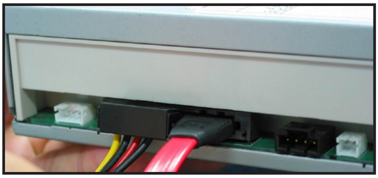
2. Dopasuj otwory na śruby i zamocuj napęd śrubami.



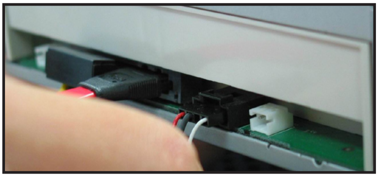
3. Ustaw we właściwym kierunku i podłącz do napędu optycznego kabel SATA. Kable SATA są zabezpieczone przed nieprawidłowym podłączeniem. Nigdy nie należy wkładać na siłę kabla SATA do złącza.



4. Podłącz kabel zasilający SATA do napędu optycznego.

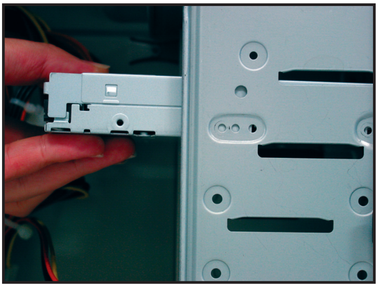


5. Podłącz kabel audio do złącza napędu optycznego.

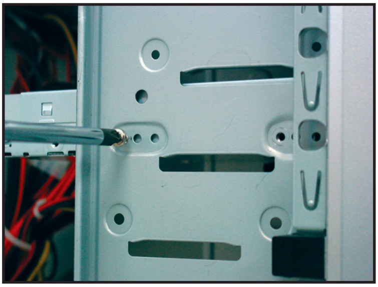


1.7.3 Napęd dyskietek FDD

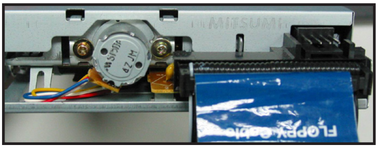
1. Zdejmij, atrapę do zatoki napędu i wsuń napęd dyskietek elastycznych do wnęki.



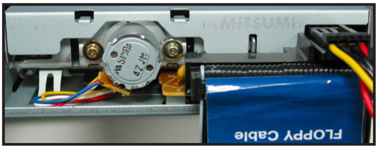
2. Dopasuj otwory na śruby i zamocuj napęd śrubami.



3. Ustaw we właściwym kierunku i podłącz do złącza napędu dyskietek FDD kabel interfejsu. Czerwony pasek na kablu odpowiada pinowi 1 i powinien pasować do pinu 1 złącza napędu dyskietek elastycznych.

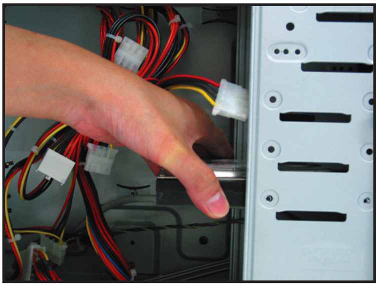


4. Podłącz kabel zasilający napędu dyskietek FDD do złącza z tyłu napędu dyskietek.



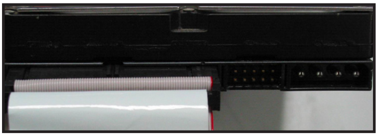
1.7.4 Dysk twardy PATA

1. Włóż dysk twardy PATA do wnęki.

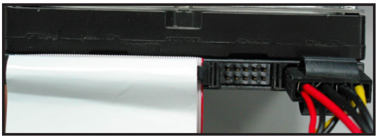


2. Dopasuj otwory na śruby i zamocuj dysk twardy śrubami.

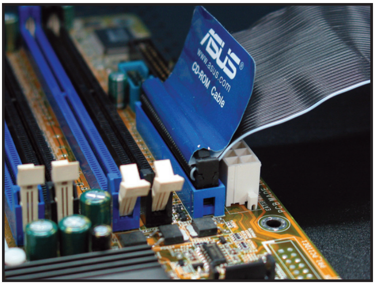
3. Ustaw we właściwym kierunku i podłącz do złącza dysku twardego kabel sygnałowy. Czerwony pasek na kablu odpowiada pinowi 1. Dopasuj nacięcie zabezpieczające przed nieprawidłowym podłączeniem i nie wkładaj złącza kabla na siłę.



4. Podłącz 4-pinowy kabel zasilający do złącza z tyłu dysku twardego.

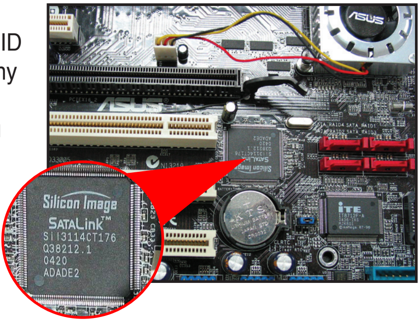


5. Podłącz drugi koniec kabla sygnałowego do odpowiedniego gniazda na płycie głównej.



Uwagi dotyczące instalacji dysku twardego PATA

- Jeśli na dysku twardym sterowanym przez kontroler RAID lub inne kontrolery zainstalowany jest system operacyjny należy najpierw zainstalować na dysku sterownik kontrolera.


Silicon Image
SATALink™
SII3114CT176
Q38212.1
0420
ADADE2

- Złącze kablowe jest oznaczone kolorami. Niebieski kolor oznacza złącze hosta, a czarny/szary złącze podstawowego/dodatkowego napędu dyskowego.

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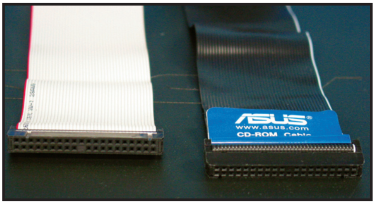
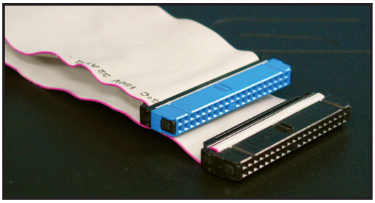
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

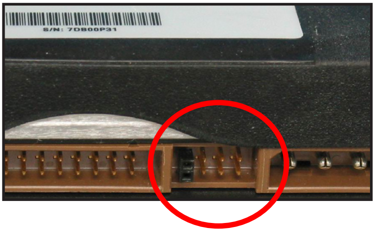
- Dyski twarde ATA IDE mogą być podłączane dwoma kablami, nowszy 80-żyłowy (po prawej) i starszy 40-żyłowy (po lewej). Dla dysków ATA66/100/133 większą wydajność gwarantuje jedynie kabel 80-żyłowy. Kable 40-żyłowe służą zwykle do podłączania napędów optycznych.


ASUS
www.asus.com
CD-ROM Cable

- Złącze kablowe jest oznaczone kolorami. Niebieski kolor oznacza złącze hosta, a czarny/szary złącze podstawowego/dodatkowego napędu dyskowego.

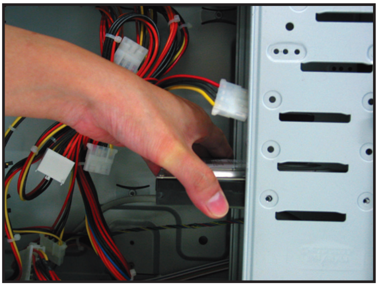


- Po podłączeniu dwóch urządzeń IDE należy ustawić zworki napędów w odmiennych pozycjach, zworkę jednego napędu w pozycji master (nadrzędny), a drugiego w pozycji slave (podległy). Jeśli używany jest kabel 80-żyłowy, można ustawić opcję cable select (wybór kabla).

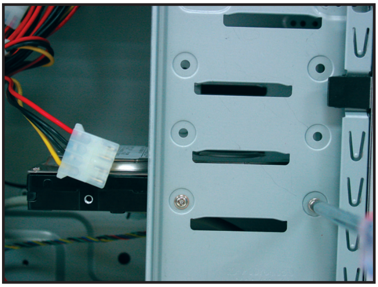

S/N: 7DB00P31

1.7.5 Dysk twardy SATA

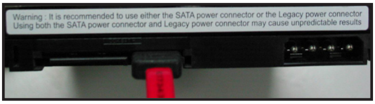
1. Włóż dysk twardy SATA do wnęki.



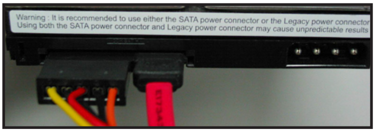
2. Dopasuj otwory na śruby i zamocuj dysk twardy śrubami.



3. Ustaw we właściwym kierunku i podłącz do złącza dysku twardego kabel sygnałowy SATA. Złącze kabla pasuje tylko w jednym kierunku.

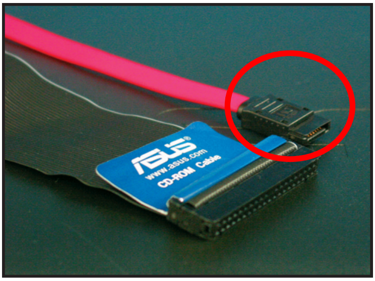

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Podłącz kabel zasilający SATA do złącza z tyłu dysku twardego.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Uwagi dotyczące instalacji dysku twardego SATA

- Interfejs Serial ATA (SATA) zapewnia większą szybkość transmisji danych i lepszą tolerancję napięcia. Wąska konstrukcja kabla SATA rozwiązuje także problemy związane z okablowaniem i poprawia przepływ powietrza w obudowie.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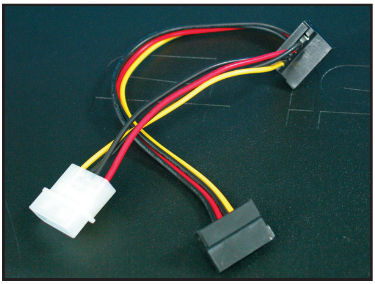
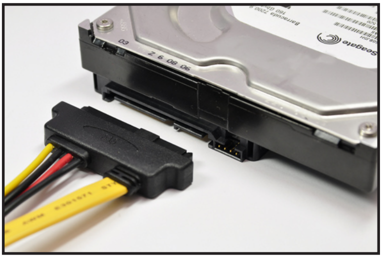
- Złącze zasilania kabla SATA różni się od tradycyjnego złącza 4-pinowego. Płyta główna ASUS jest dostarczana z kablami adaptera zasilania na wypadek, gdyby zasilacz nie zawierał nowego złącza.

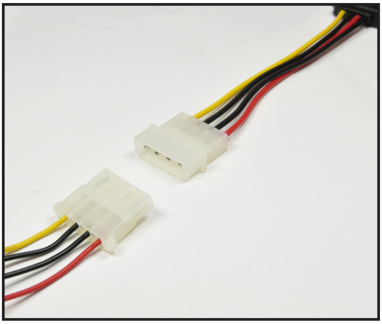


1.7.6 Dysk twardy SAS

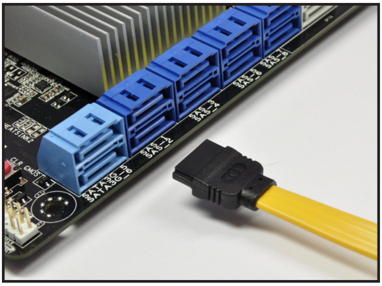
1. Ustaw i podłącz do dysku twardego kabel combo sygnałowy/zasilania SAS. Złącze kabla pasuje tylko w jednym kierunku.



2. Podłącz kabel zasilający SAS do złącza zasilania zasilacza.



3. Podłącz kabel sygnałowy SAS do złącza SAS na płycie głównej.

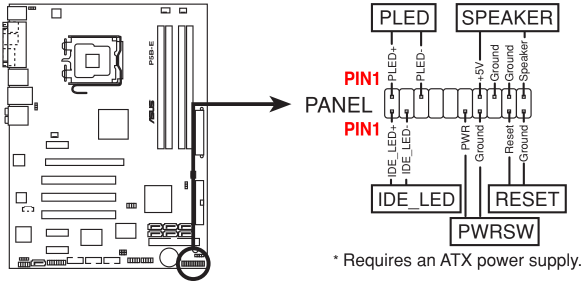

SATA3G_5
SATA3G_6
SAS_1
SAS_2
SAS_3
SAS_4
SAS_5
SAS_6
SAS_7
SAS_8
CLR_CMOS

1.8 Kable panela przedniego

Do podłączenia kabli panela przedniego:

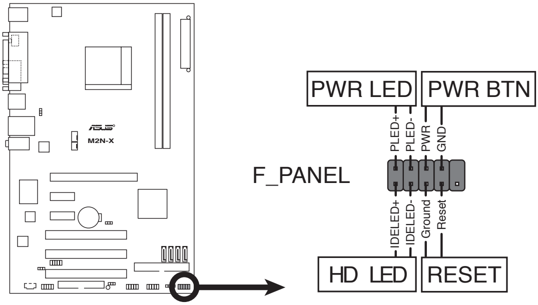
- RESET (Przełącznik Reset)
- PLED (Dioda LED zasilania)
- PWRSW (Przełącznik zasilania)
- IDE_LED (Dioda LED aktywności dysku twardego IDE)
- SPEAKER (Złącze głośnika)

20-8 pinowe złącze panela przedniego


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
PIN1
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

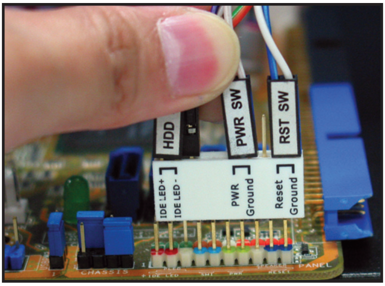
10-1 pinowe złącze panela


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Kable panela przedniego obudowy mogą się różnić w zależności od modelu i konstrukcji. Złącza te należy podłączyć do płyty głównej zgodnie z etykietą.
- Jeśli diody LED nie świecą i lokalizacja pinów jest prawidłowa, mogły zostać zamienione piny uziemienia z pinami sygnałowymi. Zwykle białe przewody oznaczają piny uziemienia, a przewody kolorowe oznaczają piny sygnałowe.
- Kable panela przedniego SPEAKER (Głośnik), RESET (Reset) i PWRSW nie wymagają określonego kierunku łączenia, a kable IDE_LED i PLED wymagają. Podłącz kable PIN1 do złącza PIN1 na płycie głównej.
- Złącze panela przedniego może się różnić zależnie od modelu płyty głównej, dalsze informacje można uzyskać w podręczniku użytkownika.

ASUS Q-Connector

Jednoczynnościowa instalacja ASUS Q-Connector oszczędza czas poprzez uniknięcie plątaniny kabli na panelu przednim. Szczegółowe informacje znajdują się w podręczniku użytkownika.

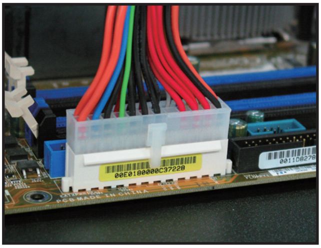


Złącze Q-connector jest dostępne w wybranych modelach. Szczegółowe informacje znajdują się w podręczniku użytkownika.

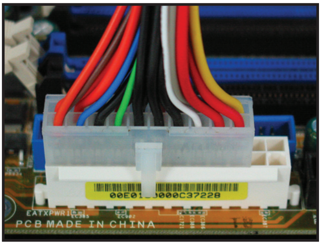
1.9 Podłączenie zasilacza ATX

Złącza zasilacza ATX pasują tylko w jednym kierunku. Użyj zaczepu bocznego do zamocowania złączy do płyty głównej. NIE należy wkładać na siłę męskich złączy zasilania do żeńskich złączy na płycie głównej. Zwykle na płycie głównej znajdują się dwa złącza zasilania, 24-pinowe i 4-pinowe. Niektóre starsze zasilacze mogą mieć tylko 20-pinowe złącze zasilania, które także pasuje do 24-pinowego złącza na płycie głównej.

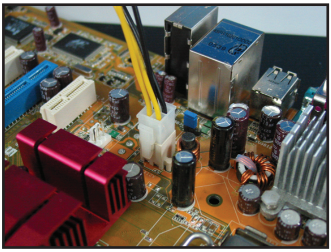
24-pinowe złącze zasilania



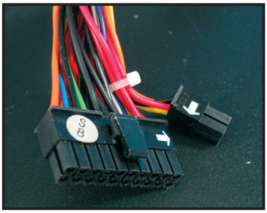
20-pinowe złącze zasilania (na 24-pinowym złączu żeńskim)

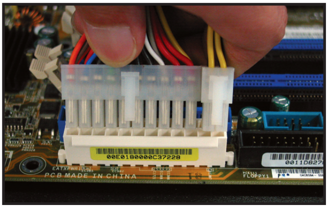


4-pin power connector



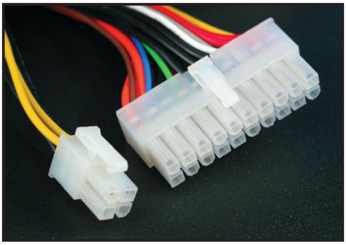
- W czasie podłączania złączy zasilania na płycie głównej NIE należy podłączać zewnętrznego źródła zasilania prądu zmiennego.
- Upewnij się, że złącza zasilania są dobrze przymocowane do płyty głównej.
- Jeśli zasilacz obsługuje 20-piny+4-piny, można łączyć te dwa złącza i zainstalować na płycie głównej złącza 24-pinowe.



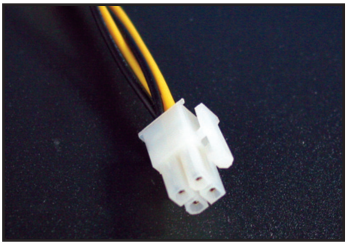


Złącza zasilania

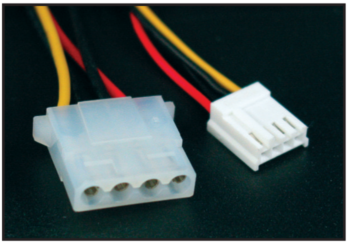
Złącze ATX 20+4 (24) pinowe



4-pinowe złącze ATX

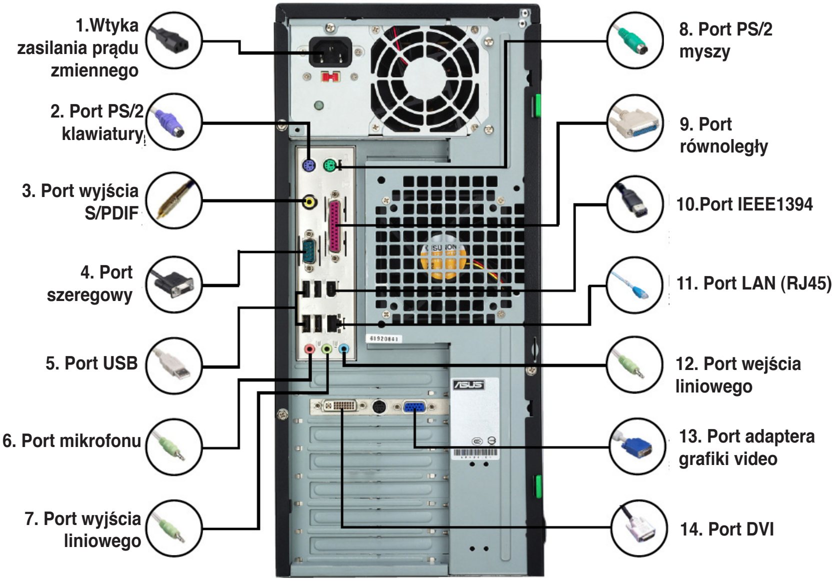


Złącze zasilania urządzeń peryferyjnych (po lewej)
Złącze zasilania napędu dyskietek (po prawej)



1.10 Urządzenia peryferyjne i akcesoria

Sprawdź rysunek poniżej w celu uzyskania informacji o podłączaniu urządzeń peryferyjnych i akcesoriów


1.Wtyka zasilania prądu zmiennego
2. Port PS/2 klawiatury
3. Port wyjścia S/PDIF
4. Port szeregowy
5. Port USB
6. Port mikrofonu
7. Port wyjścia liniowego
8. Port PS/2 myszy
9. Port równoległy
10.Port IEEE1394
11. Port LAN (RJ45)
12. Port wejścia liniowego
13. Port adaptera grafiki video
14. Port DVI

1. Wtyka zasilania prądu zmiennego + przewód przedłużacza

2. Port PS/2 klawiatury + klawiatura

3. Port wyjścia S/PDIF + cyfrowy system głośników 5.1

4. Port szeregowy + wnęka dokowania PDA

5. Port USB + urządzenia USB

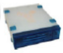
6. Port mikrofonu + mikrofon

7. Port wyjścia liniowego + głośnik

8. Port myszy PS/2 + mysz

9. Port równoległy +drukarka

10. Port IEEE1394 + zewnętrzny dysk twardy



11. Port LAN (RJ45) + modem

12. Port wejścia liniowego + nagrywarka

13. Port VGA + monitor CRT

14. Port DVI + monitor LCD

Złącza na panelu tylnym różnią się w zależności od modelu. Szczegółowe informacje znajdują się w podręczniku użytkownika.

1.11 Pierwsze uruchomienie

System uruchomi testy power-on self (autotest) lub POST. W czasie uruchomienia testów, BIOS generuje sygnały dźwiękowe (patrz tabela kodów dźwiękowych BIOS poniżej)

Sygnał dźwiękowy BIOS	Opis
Jeden ciągły sygnał, a po nim trzy krótkie sygnały	Nie wykryto VGA
Jeden ciągły sygnał, a po nim dwa krótkie sygnały i pauza (powtarzane)	Nie wykryto pamięci
Jeden ciągły sygnał, a po nim cztery krótkie sygnały	Awaria komponentu sprzętowego (AMI BIOS)
Cztery krótkie sygnały	Awaria komponentu sprzętowego (AWARD BIOS)

Rozwiązywanie problemów

Problem	Akcja
• Nie można włączyć komputera • Nie świeci dioda LED zasilania • Nie działa wentylator zasilacza.	Sprawdź czy jest prawidłowo podłączony przewód zasilający.
Komputer jest włączony ale nie ma obrazu na monitorze	• Upewnij się, że włączone jest zasilanie monitora i że podłączony jest prawidłowo kabel VGA. • Wyreguluj jasność i kontrast monitora. • Wyłącz komputer i odłącz przewód zasilający. Sprawdź, czy poprawnie zainstalowano kartę VGA.
Nie wykryto pamięci	• Sprawdź, czy posiadasz prawidłowy moduł pamięci • Upewnij się, że moduły DIMM są poprawnie osadzone w gniazdach DIMM. • Upewnij się, czy moduł pamięci pochodzi od dostawcy znajdującego się na liście akceptowanych dostawców. Sprawdź w podręczniku użytkownika informacje dotyczące QVL.
Błąd napędu dyskietek elastycznych (Wskaźnik jest stale włączony lub na ekranie pojawia się komunikat z ostrzeżeniem).	• Sprawdź konfigurację BIOS dotyczącą napędu dyskietek elastycznych. • Sprawdź, czy prawidłowo podłączono kable napędu dyskietek FDD.
Błąd dysku twardego/ optycznego (nierozpoznany lub nie wykryty)	• Sprawdź, czy prawidłowo ustawiono zworki. (Master/ Slave [Nadrzędny/Podległy]) • Sprawdź konfigurację BIOS dotyczącą dysku twardego/ napędu optycznego. • Upewnij się, że poprawnie podłączono złącza kabli urządzenia. • Upewnij się, że zainstalowano sterowniki urządzenia.

Rozdział 2: Zarządzanie/aktualizacja BIOS

2.1 Program narzędziowy AFUDOS

Program narzędziowy AFUDOS umożliwia aktualizację pliku BIOS w środowisku DOS z wykorzystaniem dyskietki rozruchowej zawierającej plik z aktualizacją BIOS. To narzędzie umożliwia także skopiowanie bieżącego pliku BIOS, który można wykorzystać jako kopię zapasową, na wypadek awarii BIOS lub uszkodzenia BIOS w trakcie procesu aktualizacji.

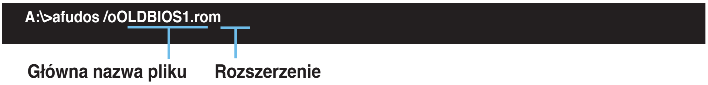
Kopiowanie bieżącej konfiguracji BIOS

W celu skopiowania pliku z bieżącą konfiguracją BIOS poprzez wykorzystanie programu narzędziowego AFUDOS:

- Upewnij się, że dyskietka nie jest zabezpieczona przed zapisem oraz, że posiada co najmniej 1024KB wolnego miejsca do zapisania pliku.
- Kolejne ekrany BIOS służą wyłącznie jako odniesienie. W rzeczywistości ekran BIOS może wyglądać inaczej.

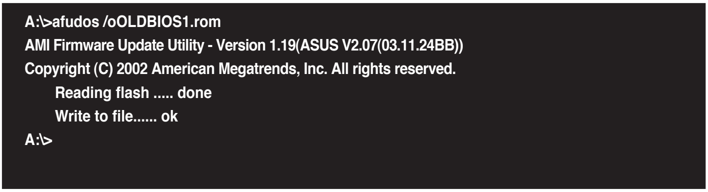
1. Skopiuj program narzędziowy AFUDOS (afudos.exe) z pomocniczego dysku DVD płyty głównej na przygotowaną wcześniej dyskietkę rozruchową.
2. Uruchom system w trybie DOS, a następnie w linii komend wpisz:
   afudos /o[nazwa pliku]

   gdzie [nazwa pliku] to dowolna, wybrana przez użytkownika nazwa pliku, składająca się z nie więcej niż ośmiu znaków alfanumerycznych dla głównej nazwy i trzech znaków alfanumerycznych dla rozszerzenia.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Naciśnij <Enter>. Program narzędziowy skopiuje plik z bieżącą konfiguracją BIOS na dyskietkę.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

Po skopiowaniu bieżącego pliku BIOS, program narzędziowy powraca do linii komend DOS.

Aktualizacja pliku BIOS

W celu aktualizacji pliku BIOS z wykorzystaniem programu narzędziowego AFUDOS:

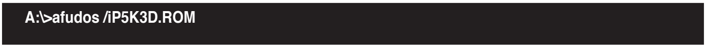
1. Odwiedź stronę sieci web ASUS (www.asus.com) i pobierz najnowszy plik BIOS dla płyty głównej. Zapisz plik BIOS na dyskietkę rozruchową.

Zapisz nazwę pliku BIOS na kartce papieru. Procedura aktualizacji wymaga wpisania DOKŁADNEJ nazwy pliku BIOS.

2. Skopiuj program narzędziowy AFUDOS (afudos.exe) z pomocniczego dysku DVD płyty głównej na utworzoną wcześniej dyskietkę rozruchową.
3. Uruchom system w trybie DOS, a następnie w linii komend wpisz:

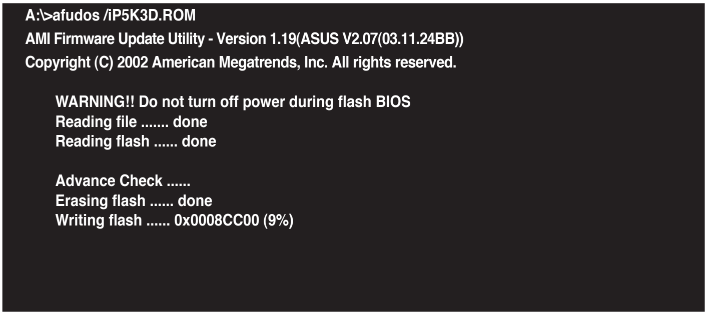
   afudos /i[filename]

   gdzie [nazwa pliku] to nazwa najnowszego lub oryginalnego pliku BIOS znajdującego się na dyskietce rozruchowej.



```
A:\>afudos /iP5K3D.ROM
```

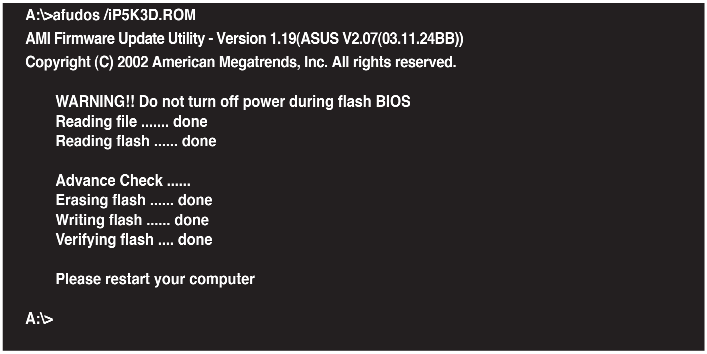
4. Program narzędziowy sprawdza plik i uruchamia aktualizację BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Aby zapobiec awarii systemu, NIE WOLNO wyłączać komputera lub resetować systemu podczas aktualizacji BIOS!

5. Po zakończeniu procesu aktualizacji BIOS, program narzędziowy powraca do linii komend DOS. Uruchom ponownie system z dysku twardego.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Program narzędziowy Award BIOS Flash Utility

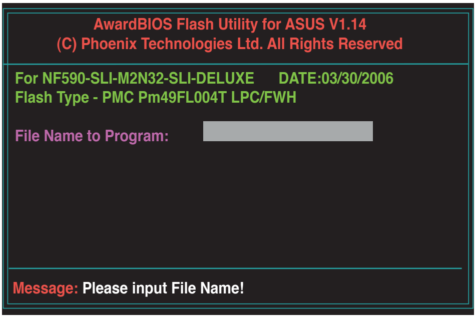
Aktualizacja BIOS

BIOS (Basic Input/Output System [Podstawowy system wejścia/wyjścia]) można zaktualizować poprzez wykorzystanie programu narzędziowego AwardBIOS Flash Utility. Wykonaj podane instrukcje w celu aktualizacji BIOS z wykorzystaniem tego programu narzędziowego.

1. Pobierz najnowszy plik BIOS ze strony sieci web ASUS. Zmień nazwę pliku na BIOS. BIN i zapisz go na dyskietce, dysku CD ROM lub na dysku USB flash w formacie FAT 16/12.

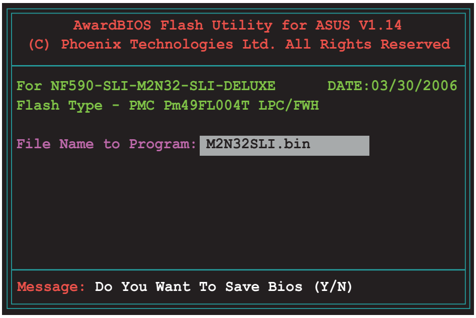
Zapisz zaktualizowany plik BIOS na dysku, aby uniknąć załadowania nieprawidłowego pliku BIOS.

2. Skopiuj program narzędziowy AwardBIOS Flash Utility (awdflash.exe) z foldera Software na pomocniczym dysku CD na dyskietkę, dysk CD ROM lub dysk USB flash z najnowszym plikiem BIOS.
3. Uruchom system w trybie DOS z użyciem utworzonej wcześniej dyskietki rozruchowej, dysku CD ROM lub dysku USB flash.
4. W trybie DOS, użyj <X:> (X oznacza literę przydzieloną dyskowi) w celu przełączenia do foldera dyskietki, dysku CD ROM lub dysku USB flash z zapisanym plikiem BIOS i programem narzędziowym AwardBIOS Flash Utility.
5. W linii komend, wpisz awdflash, a następnie naciśnij <Enter>. Na ekranie wyświetlony zostanie program narzędziowy Award BIOS Flash Utility.



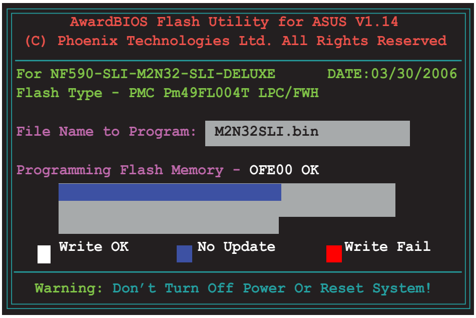
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

6. Wpisz nazwę pliku BIOS w polu File Name to Program (Nazwa pliku do programu), a następnie naciśnij <Enter>.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

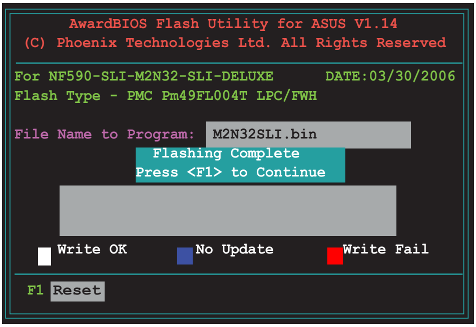
7. Gdy program narzędziowy wyświetli polecenie zapisania pliku z bieżącą konfiguracją BIOS, naciśnij <N>. Pojawi się następujący ekran.
8. Program narzędziowy sprawdzi plik BIOS na dyskietce, dysku CD ROM lub dysku USB flash i rozpocznie aktualizowanie pliku BIOS.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

  ⬜ Write OK       🟦 No Update       🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

NIE WOLNO wyłączać lub resetować systemu w podczas aktualizacji!

9. Program narzędziowy wyświetla komunikat Flashing Complete (Aktualizowanie zakończone) informujący o pomyślnym zakończeniu aktualizowania pliku BIOS. Wyjmij dysk i naciśnij <F1>, a następnie uruchom ponownie system.



```
     AwardBIOS Flash Utility for ASUS V1.14
 (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                 Flashing Complete
               Press <F1> to Continue

  ⬜ Write OK       🟦 No Update       🟥 Write Fail

 F1 Reset
```

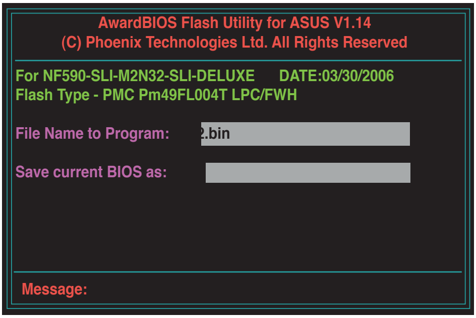
Zapisywanie pliku z bieżącą konfiguracją BIOS

Program narzędziowy AwardBIOS Flash Utility można wykorzystać do zapisania pliku z bieżącą konfiguracją BIOS. Plik z bieżącą konfiguracją BIOS można załadować, gdy plik BIOS zostanie uszkodzony podczas procesu aktualizacji.

Upewnij się, że na dyskietce, dysku CD ROM lub na dysku USB jest wystarczająca ilość miejsca do zapisania pliku.

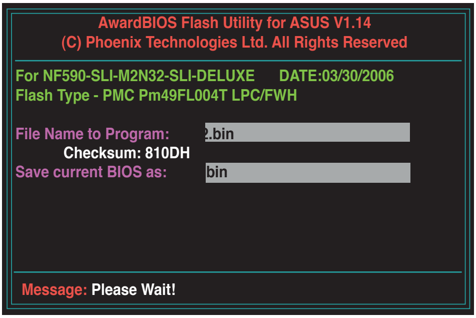
Aby zapisać plik z bieżącą konfiguracją BIOS poprzez program narzędziowy AwardBIOS Flash Utility:

1. Wykonaj czynności 1 do 6 z poprzedniej części.
2. Naciśnij <Y> gdy program narzędziowy wyświetli pytanie o zapisanie pliku z bieżącą konfiguracją BIOS. Wyświetlony zostanie następujący ekran.



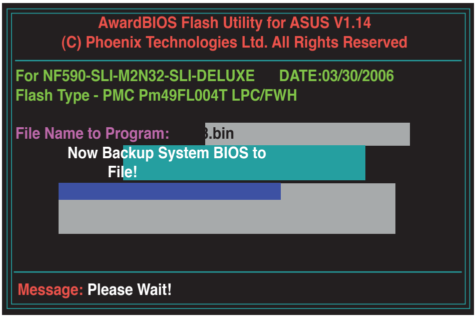
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:     .bin

Save current BIOS as:

Message:
```

3. Wpisz nazwę dla pliku z bieżącą konfiguracją BIOS w polu Save current BIOS as (Zapisz plik z bieżącą konfiguracją BIOS jako), a następnie naciśnij <Enter>.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:     .bin
          Checksum: 810DH
Save current BIOS as:     bin

Message: Please Wait!
```

4. Program narzędziowy zapisze plik z bieżącą konfiguracją BIOS na dysku, a następnie powróci do procesu aktualizowania BIOS.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:     .bin
     Now Backup System BIOS to
          File!

Message: Please Wait!
```

2.3 Program narzędziowy ASUS Update

Program ASUS Update to narzędzie umożliwiające zarządzanie, zapisywanie i aktualizację konfiguracji BIOS płyty głównej w środowisku Windows®. Program narzędziowy ASUS Update umożliwia:

- Zapisanie pliku z bieżącą konfiguracją BIOS
- Pobranie najnowszego pliku BIOS z Internetu
- Aktualizację BIOS ze zaktualizowanego pliku BIOS
- Aktualizację BIOS bezpośrednio z Internetu i
- Podgląd informacji o wersji BIOS.

Program narzędziowy znajduje się na pomocniczym dysku DVD, dostarczonym w pakiecie z płytą główną.

Program ASUS Update wymaga połączenia z Internetem poprzez sieć lokalną lub poprzez ISP (Internet Service Provider [Dostawca połączenia z Internetem]).

Instalacja programu ASUS Update

W celu instalacji programu ASUS Update:

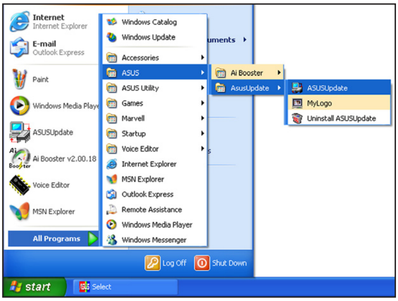
1. Włóż pomocniczy dysk DVD do napędu optycznego. Zostanie wyświetlone menu Drivers (Sterowniki).
2. Z menu **Main (Główne)**, kliknij zakładkę Utilities (Narzędzia), a następnie kliknij **Install ASUS Update VX.XX.XX (Zainstaluj program ASUS Update VX.XX.XX)**.
3. Program narzędziowy ASUS Update jest instalowany w systemie operacyjnym.

Aktualizacja BIOS poprzez Internet

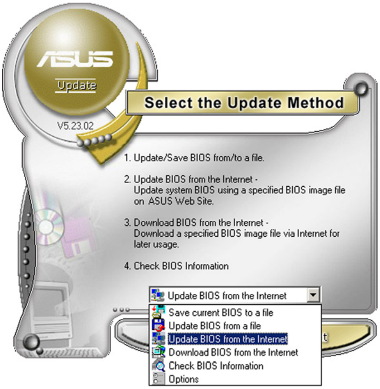
Przed aktualizacją BIOS z wykorzystaniem tego programu narzędziowego należy zakończyć wszystkie aplikacje Windows®.

W celu aktualizacji BIOS poprzez Internet:

1. Z pulpitu Windows® poprzez kliknięcie **Start > Programy > ASUS > ASUSUpdate > ASUSUpdate**. Pojawi się główne okno programu ASUS Update.

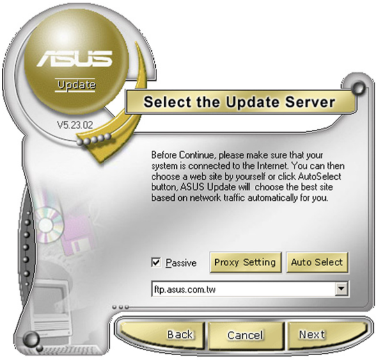

Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. Wybierz z menu rozwijanego **Update BIOS from the Internet (Aktualizuj BIOS przez Internet)**, a następnie kliknij **Next** (Dalej).


ASUS
Update
V5.23.02
Select the Update Method
Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

3. Wybierz najbliższą witrynę ASUS FTP, aby uniknąć zatorów ruchu sieciowego lub kliknij **Auto Select** (Automatyczny wybór). Kliknij **Next** (Dalej).

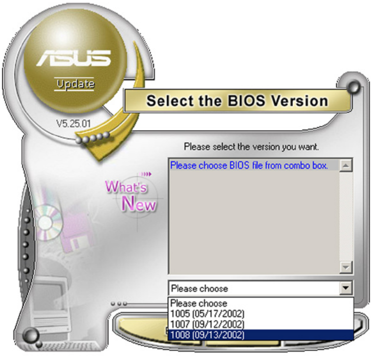

ASUS
Update
V5.23.02
Select the Update Server
Proxy Setting
Auto Select
Back
Cancel
Next

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

4. Z witryny FTP, wybierz wersję BIOS do pobrania. Kliknij **Next** (Dalej).


ASUS
Update
V5.25.01
Select the BIOS Version
What's New
Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

Please select the version you want.

Please choose BIOS file from combo box.

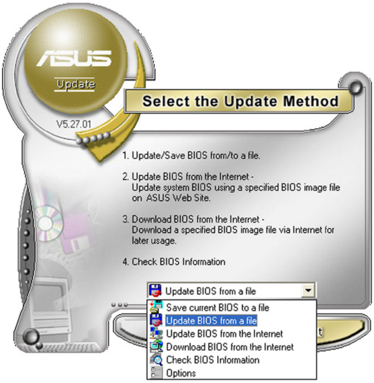
5. Wykonaj instrukcje ekranowe w celu dokończenia procesu aktualizacji.

Program narzędziowy ASUS Update może wykonać automatyczną aktualizację poprzez Internet. Należy regularnie wykonywać aktualizacje w celu udostępnienia wszystkich funkcji.

Aktualizacja BIOS poprzez plik BIOS

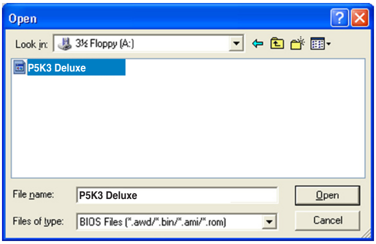
W celu aktualizacji BIOS poprzez plik BIOS:

1. Z systemu Windows® klikając **Start > Programy > ASUS > ASUSUpdate > ASUSUpdate**. Pojawi się główne okno ASUS Update.
2. Wybierz z menu rozwijanego **Update BIOS from a file (Aktualizuj BIOS z pliku)**, a następnie kliknij Next (Dalej).


ASUS
Update
V5.27.01
Select the Update Method
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

3. Zlokalizuj plik BIOS w oknie Open (Otwórz), a następnie kliknij **Open** (Otwórz).
4. Wykonaj instrukcje ekranowe w celu dokończenia procesu aktualizacji.


Open
P5K3 Deluxe
Open
Cancel

Look in: 3½ Floppy (A:)

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Upewnij się, że załadowane zostały domyślne ustawienia BIOS, aby zapewnić zgodność i stabilność systemu. Wybierz pozycję **Load Setup Defaults (Załaduj ustawienia domyślne)** w menu **Exit (Zakończ)**.

2.4 Program aktualizacji BIOS ASUS

Program ASUS BIOS Updater umożliwia aktualizację BIOS w środowisku DOS. Narzędzie to umożliwia także skopiowanie bieżącego pliku BIOS, który można potraktować jako kopię zapasową na wypadek awarii BIOS lub nieprawidłowości podczas procesu aktualizacji.

Kolejne zrzuty ekranów narzędzia służą tylko jako informacja. Rzeczywisty wygląd ekranów narzędzia może być inny od pokazanego.

Przed aktualizacją BIOS

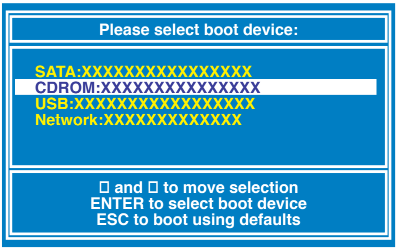
1. Przygotować płytę Support CD/DVD z oprogramowaniem płyty głównej oraz napęd USB flash w formacie FAT32/16 i z jedną partycją.
2. Pobrać najnowsze wersje pliku BIOS i narzędzia BIOS Updater ze strony internetowej firmy ASUS pod adresem http://support.asus.com i zapisać je na napędzie USB flash.

- NTFS nie jest obsługiwane w środowisku DOS. Nie należy zapisywać pliku BIOS i narzędzia BIOS Updater na dysk twardy lub napęd USB flash w formacie NTFS.
- Nie zapisywać pliku BIOS na dyskietkę, z powodu zbyt małej pojemności dyskietki.

3. Wyłączyć komputer i odłączyć wszystkie dyski SATA (opcja).

Uruchamianie systemu w środowisku DOS

1. Włożyć napęd USB flash z najnowszym plikiem BIOS i narzędziem BIOS Updater do gniazda USB.
2. Uruchomić komputer. Kiedy wyświetlone zostanie logo ASUS Logo, nacisnąć przycisk <F8>, aby wyświetlić menu **BIOS Boot Device Select Menu (Menu wyboru urządzenia uruchamiania BIOS)**. Włożyć płytę DVD do napędu optycznego i wybrać napęd optyczny jako urządzenie, z którego uruchamiany jest komputer.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

□ and □ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Kiedy wyświetlone zostanie menu **Make Disk (Wykonaj dysk)**, wybrać polecenie **FreeDOS command prompt (Zachęta polecenia FreeDOS)** naciskając numer pozycji.
4. Po wyświetleniu zachęty FreeDOS, wpisać **d:** i nacisnąć przycisk <Enter>, aby przełączyć dysk z napędu C (napęd optyczny) na napęd D (napęd USB flash).

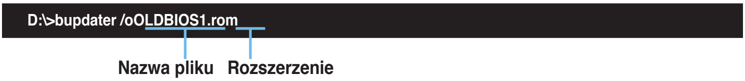
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Tworzenie kopii zapasowej aktualnego BIOS

Tworzenie kopii zapasowej aktualnego pliku BIOS za pomocą narzędzia BIOS Updater

Sprawdzić, czy napęd USB flash nie jest chroniony przed zapisem i czy jest na nim wystarczająco wolnego miejsca na zapisanie pliku.

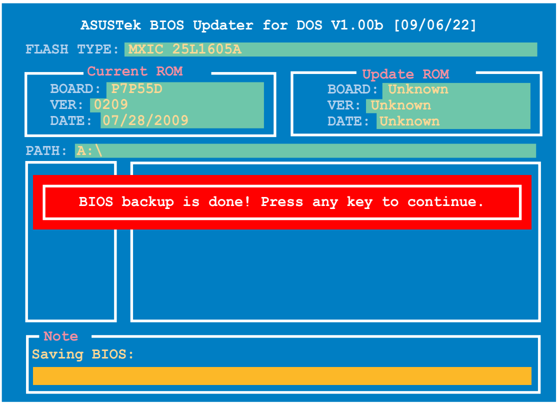
1. Po wyświetlaniu zachęty FreeDOS wpisać **bupdater /o[nazwa pliku]** i nacisnąć przycisk <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

[Nazwa pliku] to określona przez użytkownika nazwa pliku, składająca się z maksymalnie ośmiu znaków alfanumerycznych, jako nazwa pliku i trzech znaków jako rozszerzenie.

2. Pojawi się ekran kopii zapasowej programu BIOS Updater, wskazując proces wykonywania kopii zapasowej BIOS. Po wykonaniu kopii zapasowej BIOS, naciśnij dowolny przycisk, aby powrócić do linii poleceń DOS.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                    Update ROM
BOARD: P7P55D                  BOARD: Unknown
VER: 0209                      VER: Unknown
DATE: 07/28/2009               DATE: Unknown
PATH: A:\

BIOS backup is done! Press any key to continue.

Note
Saving BIOS:
```

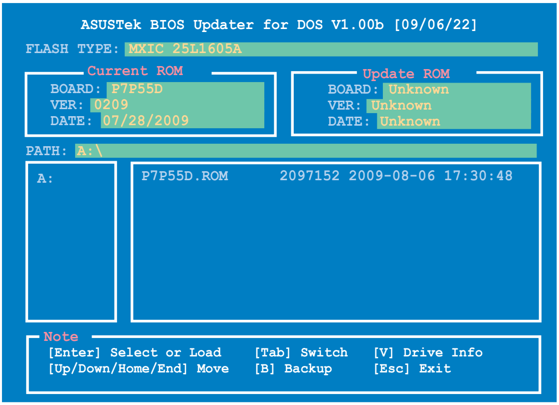
Aktualizacja pliku BIOS

Aby zaktualizować plik BIOS poprzez program BIOS Updater

1. Po wyświetlaniu zachęty FreeDOS wpisać **bupdater /pc /g** i nacisnąć przycisk <Enter>.

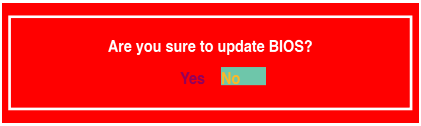
```
D:\>bupdater /pc /g
```

2. Pojawi się ekran programu BIOS Updater pokazany poniżej.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
           Current ROM                     Update ROM
   BOARD: P7P55D                   BOARD: Unknown
   VER: 0209                       VER: Unknown
   DATE: 07/28/2009                DATE: Unknown
PATH: A:\
 A:          P7P55D.ROM       2097152 2009-08-06 17:30:48

  Note
   [Enter] Select or Load    [Tab] Switch    [V] Drive Info
   [Up/Down/Home/End] Move   [B] Backup      [Esc] Exit
```

3. Nacisnąć przycisk <Tab>, aby przejść między polami ekranu i za pomocą przycisków <Up/Down/Home/End> wybrać plik BIOS i nacisnąć przycisk <Enter>. Program BIOS Updater sprawdzi wybrany plik BIOS i wyświetli polecenie potwierdzenia aktualizacji BIOS.



```
Are you sure to update BIOS?
        Yes   No
```

4. Wybierz **Yes (Tak)** i naciśnij <Enter>. Po zakończeniu aktualizacji BIOS, naciśnij <ESC> aby opuścić to program BIOS Updater. Uruchom ponownie komputer.

NIE zamykaj lub nie resetuj systemu w czasie aktualizacji BIOS, ponieważ może to spowodować problemy z rozruchem systemu!

- Wersja programu BIOS Updater 1.04 lub wersje nowsze, po aktualizacji BIOS automatycznie zamykają linię poleceń DOS.
- Pamiętaj, aby załadować domyślne ustawienia BIOS, aby zapewnić zgodność i stabilne działanie systemu. Wybierz element **Load Setup Defaults (Załaduj ustawienia domyślne)** w menu **Exit (Zakończ)** BIOS. Szczegółowe informacje zawiera Rozdział 3 podręcznika użytkownika płyty głównej.
- Pamiętaj o podłączeniu wszystkich dysków twardych SATA po zaktualizowaniu pliku BIOS, o ile zostały one odłączone.

Rozdział 3: Rozwiązywanie problemów

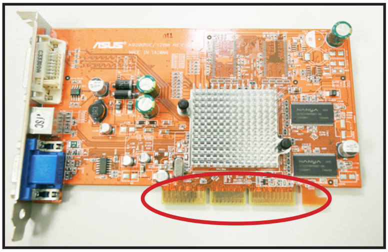
3.1 Rozwiązywanie problemów DIY płyty głównej

Po zmontowaniu komputera, podczas jego uruchamiania mogą wystąpić problemy. Ten rozdział podaje odpowiedzi na typowe pytania dotyczące komputera, które należy poznać przed przejściem do systemu operacyjnego. Przeczytaj ten rozdział w celu uzyskania podstawowych informacji rozwiązywania problemów. Informacje te oszczędzają czas i pozwalają uniknięcia kontaktowania się z pomocą techniczną ASUS lub zwracania produktu do naprawy gwarancyjnej.

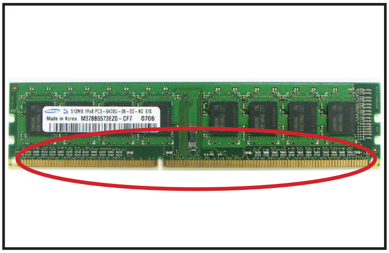
3.1.1 Podstawowe informacje rozwiązywania problemów

A. Nieprawidłowe połączenie

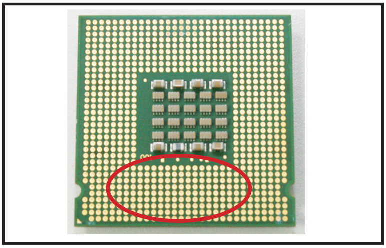
1. Upewnij się, że złote styki kart rozszerzeń, modułów DIMM oraz procesora nie są zanieczyszczone.
2. Użyj bawełnianego wacika i wytrzyj delikatnie złote styki.



Złoty styk karty VGA



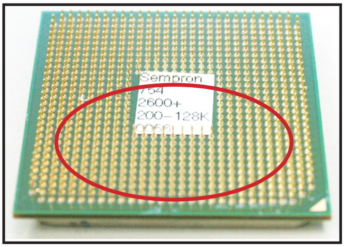
Złoty styk modułu DIMM



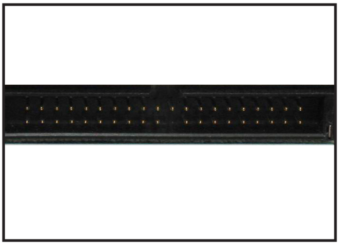
Złote styki podstawki LGA775 procesora

Kartę lub procesor należy trzymać za krawędzie i NIE wolno dotykać złotych styków. Elektryczność statyczna może spowodować poważne uszkodzenie urządzenia.

3. Upewnij się, że szpilki złącza lub szpilki procesora nie są połamane lub wygięte. Połamane lub pogięte szpilki mogą spowodować nieprawidłowe działanie komponentów. W celu uzyskania dalszej pomocy należy skontaktować się z dostawcą.



Złote szpilki procesora AMD



Szpilki złącza

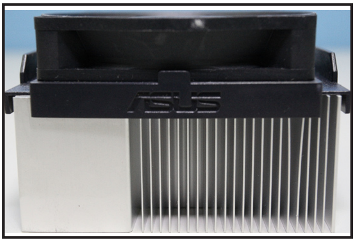
Jeśli po zakupieniu okaże się, że niektóre szpilki zostały złamane lub wygięte, dostawca może zażądać opłaty za naprawę. Czasami złamanych lub wygiętych szpilek NIE MOŻNA NAPRAWIĆ.

B. Przegrzany procesor

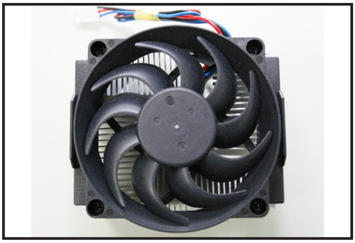
1. Wytrzyj do czysta powierzchnię procesora czystą szmatką. Wpuść kilka kropli pasty przewodzącej ciepło na miejsca styku procesora z radiatorem. Należy upewnić się, że pasta została równo rozłożona w postaci cienkiej warstwy.

Powierzchnia procesora

2. Upewnij się, że nie ma zanieczyszczeń na radiatorze i wentylatorze.



Widok z boku radiatora i wentylatora



Widok z góry radiatora i wentylatora

3. Wykonaj instrukcje producenta radiatora i wentylatora dotyczące czyszczenia zanieczyszczeń.

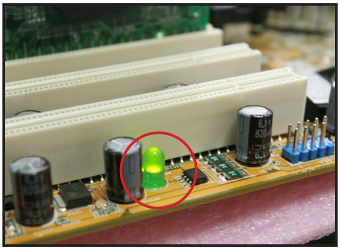
3.2 Inne spotykane problemy

- Po odłączeniu urządzeń od systemu należy sprawdzić, czy odłączone są wszystkie kable zasilające.
- W czasie procedury POST (Power-On Self-Test [Autotest]), na ekranie wyświetlone zostaną wszystkie komunikaty błędów.
- Jeśli generowane są sygnały dźwiękowe BIOS należy sprawdzić szczegółowe informacje w części 1.11.
- Sprawdź poniższą tabele kontrolną w celu dalszego sprawdzenia.

	Sprawdzane elementy					
	Dioda LED zasilania	**Obraz na ekranie**	**Radiator i wentylator**	**Sygnały dźwię-kowe BIOS**	**Komunikaty błędów**	
Brak zasilania	Wyłączona	Nie	Zatrzymane	Nie	Nie dotyczy	3-4
Brak obrazu na ekranie	Włączona	Nie	Zatrzymane	Nie	Nie dotyczy	3-5
	Włączona	Nie	Uruchomione	Nie	Nie dotyczy	3-5
	Włączona	Nie	Uruchomione	Tak	Nie dotyczy	3-5
Nie można uruchomić systemu operacyjnego	Włączona	Tak	Uruchomione	Tak	Tak	3-5
	Włączona	Tak	Uruchomione	Nie	Tak	3-5
	Włączona	Tak	Uruchomione	Nie	Nie	3-5

Jeśli problem został naprawiony, ale pojawił się nowy problem należy przejść ponownie do listy kontrolnej. Jeśli problem utrzymuje się w celu uzyskania dalszej pomocy należy skontaktować się z dostawcą lub z pomocą techniczną ASUS.

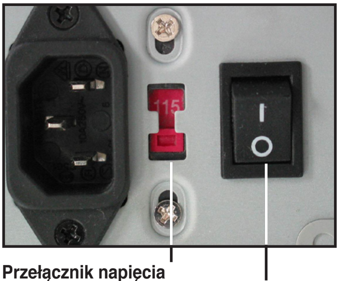
3.2.1 Brak zasilania



Płyty główne ASUS są dostarczane z diodą LED oczekiwania zasilania. Światła wskaźników LED oznaczają włączenie systemu. Jeśli dioda LED nadal się świeci należy wykonać podane poniżej instrukcje w celu naprawienia problemu.

1. 1. Należy pamiętać, aby ustawić w zasilaczu prawidłowe napięcie wejścia prądu zmiennego dla danego regionu i włączyć zasilacz.

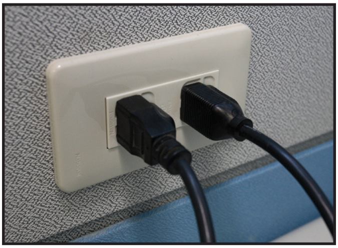
   - Przed wykonaniem ustawień wejścia prądu zmiennego sprawdź, czy odłączona została wtyka zasilająca. Nie odłączenie wtyki spowoduje poważne uszkodzenie zasilacza.
   - Nie wyregulowanie zasilacza na prawidłową wartość napięcia prądu zmiennego może spowodować poważne uszkodzenie systemu.



Przełącznik napięcia wejścia prądu zmiennego

Przełącznik zasilania "I": Włączenie: "O": Wyłączenie

2. Upewnij się, że do gniazda ściennego podłączony został przewód zasilający.
   - Podłącz wtykę zasilania bezpośrednio do gniazda ściennego. NIE należy podłączać jej do przedłużacza, UPS (uninterruptible power supply [System awaryjnego podtrzymania zasilania]) lub innych urządzeń.
   - Zamień wtyki zasilające systemu i monitora w celu sprawdzenia, czy gniazdo ścienne działa normalnie.



3. Jeśli problem utrzymuje się, można skontaktować się z dostawcą w celu uzyskania nowego zasilacza. Jeśli zasilacz działa należy skontaktować się z dostawcą płyty głównej ASUS w celu uzyskania usługi gwarancyjnej dla płyty głównej.

3.2.2 Nieudane uruchomienie; Brak obrazu na ekranie

Większość awarii rozruchu i brak obrazu na ekranie jest spowodowana nieprawidłowym działaniem urządzenia lub nieprawidłową instalacją. Wykonaj instrukcje poniżej w celu naprawienia problemu.

1. Upewnij się, że podłączone są wszystkie kable zasilające.
2. Sprawdź, czy problem jest związany z urządzeniami rozszerzenia.
    - Odłącz wszystkie karty rozszerzenia i urządzenia. Wykonaj restart systemu pozostawiając jedynie płytę główną, monitor, kartę VGA, moduły pamięci, zasilacz, radiator i wentylator, klawiaturę i mysz.
    - Jeśli system zacznie działać normalnie, przyczyną problemu jest jedno z urządzeń rozszerzenia. Przeinstaluj w systemie kolejno odłączone urządzenia rozszerzenia, odnajdując uszkodzone urządzenie
3. Sprawdź, czy problem jest spowodowany podstawowymi urządzeniami systemu.
    - Jeśli dostępne są urządzenia zapasowe, można zamieniać kolejne urządzenia w celu odszukania uszkodzonego urządzenia w kolejności “moduł pamięci, procesor, płyta główna, dysk twardy/dysk optyczny, klawiatura/mysz.”

Po znalezieniu uszkodzonego urządzenia, skontaktuj się z dostawcą w celu wykonania naprawy.

3.2.3 Brak możliwości uruchomienia systemu operacyjnego

1. Jeśli problem wystąpił po dodaniu urządzenia. Odłącz nowo dodane urządzenie i uruchom ponownie system. Jeśli system będzie działał normalnie bez urządzenia, przyczyną problemu może być uszkodzenie urządzenia lub niezgodność urządzenia z systemem. Skontaktuj się z dostawcą urządzenia w celu uzyskania pomocy.
2. Jeśli problem wystąpił po zainstalowaniu oprogramowania lub sterownika. Wykonaj podane poniżej instrukcje w celu naprawienia problemu.
    a. Uruchom system operacyjny w trybie awaryjnym i odłącz oprogramowanie lub sterownik.
    b. Skontaktuj się z producentem systemu operacyjnego w celu uzyskania dalszej pomocy.
    c. Jeśli poprzednie instrukcje nie rozwiązują problemu, może być potrzebne sformatowanie dysku twardego i ponowna instalacja nowego systemu operacyjnego.
3. Jeśli problem wystąpił po zmianie ustawień BIOS, uruchom ponownie system i po przejściu do konfiguracji BIOS załaduj domyślne ustawienia systemu. Szczegółowe informacje znajdują się w podręczniku użytkownika płyty głównej.

4. Jeśli problem jest spowodowany infekcją wirusową komputera lub uszkodzeniem plików, wykonaj instrukcje poniżej w celu naprawienia problemu.
    a. Uruchom system operacyjny w trybie awaryjnym i wykonaj pełne skanowanie wirusów używając programu antywirusowego.
    b. Skontaktuj się z producentem systemu operacyjnego w celu uzyskania dalszej pomocy.
    c. Jeśli poprzednie instrukcje nie rozwiązują problemu, może być potrzebne sformatowanie dysku twardego i ponowna instalacja nowego systemu operacyjnego.

3.2.4 FAQ

P1: Wielkość pamięci wykazana podczas testu POST różni się od zainstalowanej pamięci.

O1: Różnica ta jest spowodowana uszkodzonymi modułami pamięci lub nieprawidłową instalacją DIMM. Upewnij się, że moduły DIMM są w dobrym stanie, oraz, że zostały zainstalowane prawidłowo. Szczegółowe informacje sprawdź w podręczniku użytkownika płyty głównej. Po zainstalowaniu 4.0 GB pamięci, zgłoszenie 3.X GB, jest prawidłowe.

P2. System nie wykrywa napędu dyskietek, ale stale świeci się wskaźnik napędu dyskietek elastycznych.

O2: Nieprawidłowo został zainstalowany kabel napędu dyskietek elastycznych. Upewnij się, że czerwony pasek na kablu (pin1) odpowiada pinowi 1 złącza napędu dyskietek elastycznych.

P3: Po podłączeniu dysku USB flash lub zewnętrznych dysków twardych nie uruchamia się system operacyjny.

O3: Po wykryciu przez system dysku USB flash lub interfejsu USB z podłączonymi dyskami twardymi, może zmienić priorytet urządzeń startowych. Odłącz urządzenia USB i uruchom system ponownie.

P4: Podczas instalacji Windows XP, nie można zlokalizować napędu dysku twardego zainstalowanego z kontrolerem RAID.

O4: Windows XP nie zawiera sterownika RAID, dlatego nie jest możliwe wykrycie dysku twardego. Skopiuj kontroler RAID na dyskietkę i podczas uruchamiania z dysku systemowego Windows XP, naciśnij <F6> w celu odczytania sterownika z dyskietki. Szczegółowe informacje znajdują się w podręczniku użytkownika płyty głównej.

Rozdział 4: Wskazówki dotyczące konserwacji komputera

4.1 Prawidłowa konserwacja komputera

Komputer osobisty podobnie jak inne urządzenia domowe należy chronić przed wilgocią, bezpośrednim działaniem słońca i źródłami elektryczności statycznej. Nie należy przenosić komputera gdy jest włączony ponieważ może to spowodować jego uszkodzenie. Kurz wewnątrz komputera może wpłynąć na działanie napędów dyskowych i powodować przegrzewanie, a w rezultacie uszkodzenie komputera lub zniszczenie komponentów.

4.2 Podstawowe elementy

1. Gdy nie jest używany, komputer należy przykryć pokrywą chroniącą przed kurzem.
2. W czasie używania komputera, nie należy kłaść żadnych elementów na monitorze, aby nie blokować otworów wentylacyjnych. Nadmierne ciepło może spowodować nieprawidłowe działanie monitora.
3. Nie należy umieszczać komputera blisko ścian i należy pozostawić miejsce na rozproszenie ciepła. Przegrzanie może spowodować awarię systemu.
4. Komputer należy ustawić na stabilnej powierzchni.
5. Komputer należy trzymać z dala od miejsc o ekstremalnej temperaturze. Najbardziej odpowiednia temperatura otoczenia to 5°C do 30°C. W celu lepszego odprowadzenia ciepła należy zastosować klimatyzator lub wentylator elektryczny.
6. Aby uniknąć nieprawidłowego przepływu powietrza należy starannie poukładać kable wstęgowe wewnątrz obudowy PC.

4.3 Informacje dotyczące używania

1. Komputer należy włączać i wyłączać regularnie. Jeśli komputer wymaga długiego działania należy zastosować lepszy wentylator systemowy/procesora i wysokonapięciowy zasilacz.
2. Nagły zanik zasilania może spowodować uszkodzenie dysku twardego. Gdy zasilanie jest niestabilne, zaleca się zastosowanie zasilacza stabilizującego napięcie.
3. Należy regularnie porządkować pliki danych, wykonywać skanowanie antywirusowe, odnawiać sygnatury wirusów oraz wykonywać defragmentację dysku.
4. Należy regularnie usuwać kurz i czyścić komputer (Przed czyszczeniem należy odłączyć wszystkie przewody zasilające).
   - Wymontuj płytę główną i dyski twarde/napędy optyczne, a następnie oczyść je sprężonym powietrzem lub miękką szczotką/pędzelkiem.
   - Usuń kurz i kawałki włosów z zasilacza odkurzaczem antystatycznym.

4.4 Wskazówki

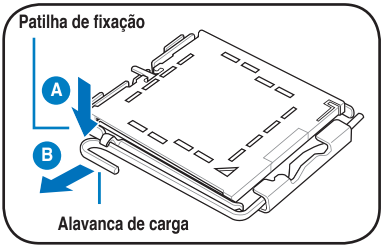
1. Jeśli komputer nie będzie długo używany, aby zapobiec uszkodzeniu w wyniku zawilgocenia należy włożyć do obudowy absorbery wilgoci.
2. W klimacie o wysokiej temperaturze i wilgoci, lepiej jest włączać komputer co tydzień. Czynność ta także zapobiega uszkodzeniom spowodowanym wilgocią.

Capítulo 1: Arranque rápido

1.1 Instalação do CPU

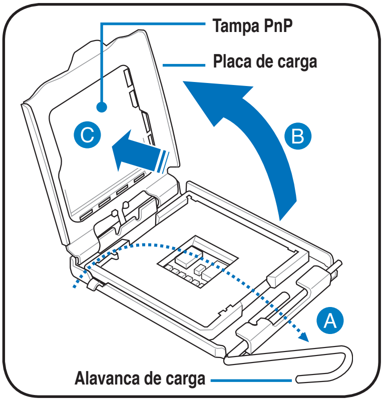
1.1.1 Socket Intel® LGA775

1. Procure o socket do CPU na Motherboard.
2. Exerça pressão sobre a alavanca com o seu polegar (A) e de seguida mova-a para a esquerda (B) até ficar liberta da patilha de fixação.

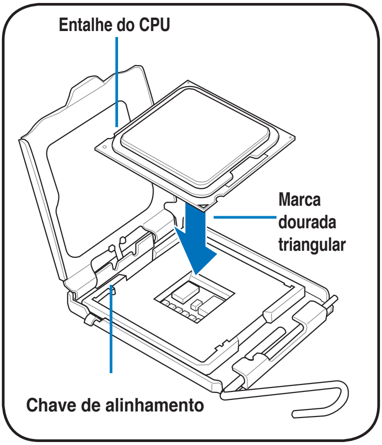

Patilha de fixação
A
B
Alavanca de carga

Para evitar danificar os pinos do socket, não remova a tampa PnP a não ser que esteja a instalar um CPU..

3. Levante a alavanca na direcção indicada pela seta e num ângulo de 135º.
4. Levante a placa de carga com o polegar e o dedo indicador num ângulo de 100º (B), depois afaste a tampa PnP da janela da placa de carregamento para a remover (C).

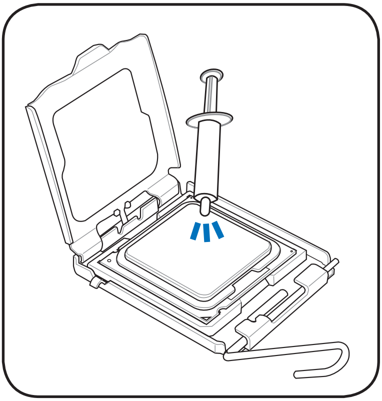

Tampa PnP
Placa de carga
C
B
A
Alavanca de carga

5. Posicione o CPU por cima do socket, certificando-se de que o triângulo dourado se encontra no canto inferior esquerdo do socket. De seguida, encaixe a chave de alinhamento do socket no entalhe existente no CPU.



O CPU encaixa apenas numa direcção. NÃO force a entrada do CPU no socket para evitar dobrar os conectores existentes no mesmo e danificar o CPU!

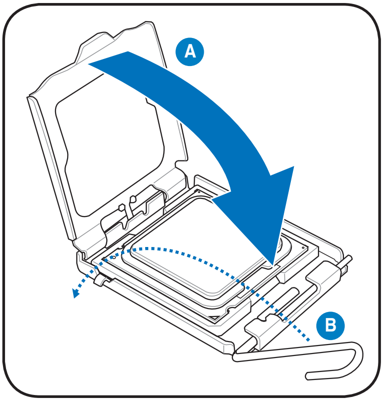
6. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

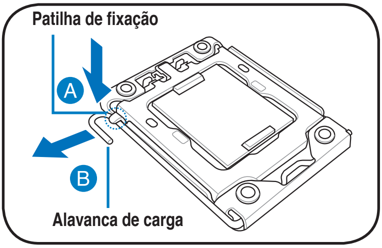
7. Feche a placa de carga (A), de seguida exerça pressão sobre a alavanca de carga (B) até esta encaixar com um estalido na patilha de fixação..



1.1.2 Socket Intel® LGA1366

1. Procure o socket do CPU na Motherboard.

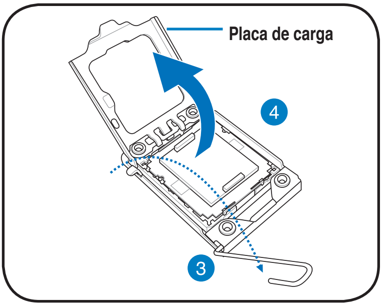
2. Exerça pressão sobre a alavanca com o seu polegar (A) e de seguida mova-a para a esquerda (B) até ficar liberta da patilha de fixação.


Patilha de fixação
A
B
Alavanca de carga

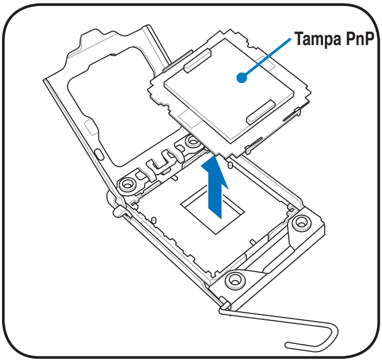
Para evitar danificar os pinos do socket, não remova a tampa PnP a não ser que esteja a instalar um CPU.

3. Levante a alavanca na direcção indicada pela seta e num ângulo de 135º.

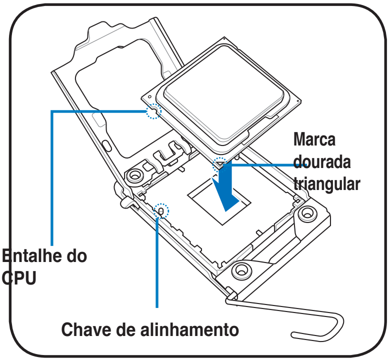
4. Levante a placa de carga com o polegar e o dedo indicador num ângulo de 100º.


Placa de carga
4
3

5. Remova a tampa PnP do socket do CPU.

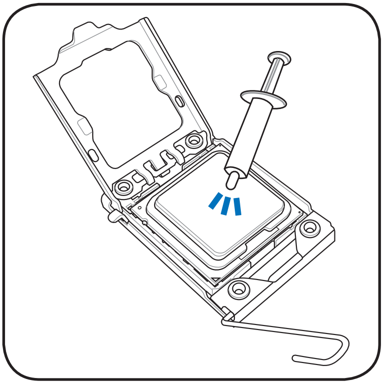


6. Posicione o CPU por cima do socket, certificando-se de que o triângulo dourado se encontra no canto inferior esquerdo do socket. De seguida, encaixe a chave de alinhamento do socket no entalhe existente no CPU.



O CPU encaixa apenas numa direcção. NÃO force a entrada do CPU no socket para evitar dobrar os conectores existentes no mesmo e danificar a CPU!

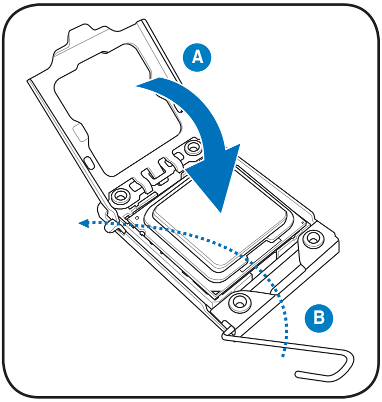
7. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

8. Feche a placa de carga (A), de seguida exerça pressão sobre a alavanca de carga (B) até esta encaixar com um estalido na patilha de fixação..

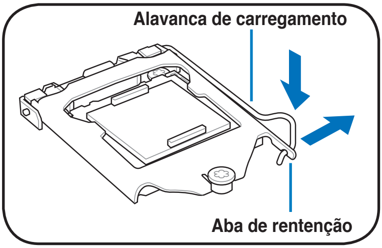


1.1.3 Socket Intel® LGA1156

A CPU LGA1155 é incompatível com o socket LGA1156. NÃO instale uma CPU LGA1155 num socket LGA1156.

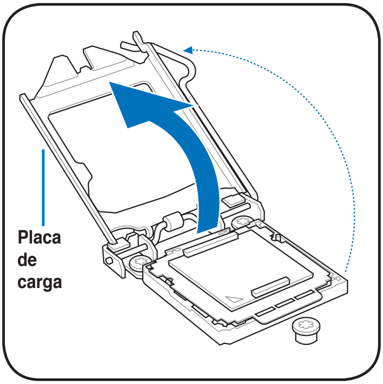
1. Localize o socket do CPU na Motherboard.

2. Pressione a alavanca de carregamento com o polegar (A), depois desloque-a para a direita (B) até que esta seja libertada da aba de retenção.

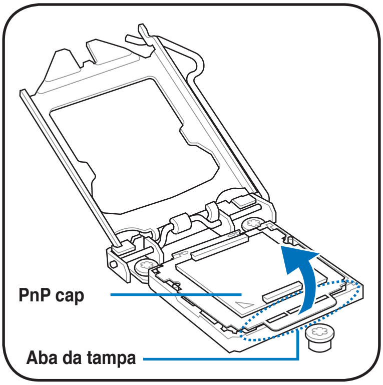

Alavanca de carregamento
Aba de rentenção

Para evitar danos nos pinos do socket, não remova a tampa PnP a não ser que seja para instalar um CPU.

3. Levante a alavanca de carregamento na direcção da seta até que a placa de carregamento esteja completamente levantada.

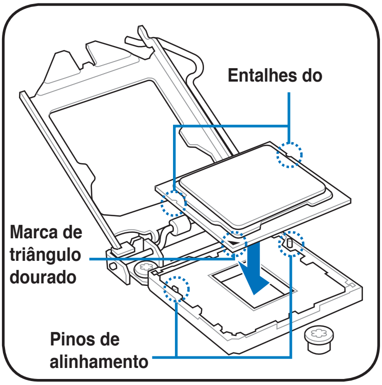

Placa de carga

4. Remova a tampa PnP do socket do CPU levantando a aba.


PnP cap
Aba da tampa

5. Coloque o CPU em cima do socket, certificando-se de que o triângulo - dourado se encontra no canto inferior esquerdo, e depois encaixe os pinos de alinhamento nos entalhes do CPU.

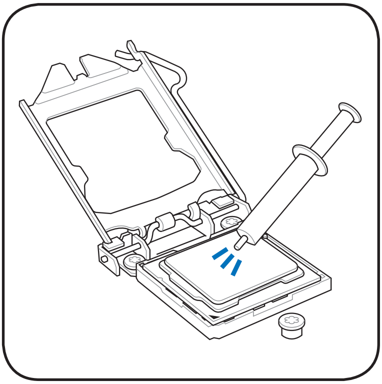
O CPU encaixa apenas numa orientação correcta. NÃO force o encaixe do CPU no socket para evitar dobrar os conectores do socket e danificar o CPU!



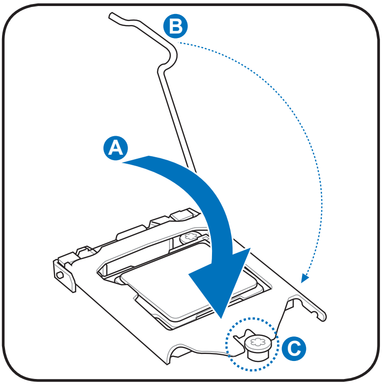
6. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.

Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

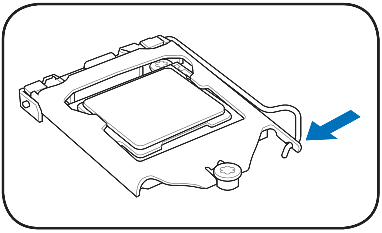
O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.



7. Feche a placa de carregamento (A), e depois pressione a alavanca de carregamento (B), assegurando-se de que a extremidade frontal da placa carregamento desliza para debaixo do pino de retenção (C).



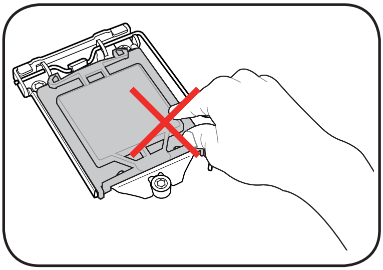
8. Insira a alavanca de carregamento debaixo da aba de retenção.



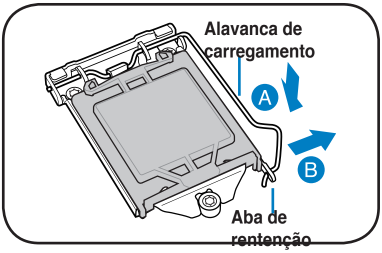
1.1.4 Socket Intel® LGA1155 (Tampa PnP na placa de carregamento)

A CPU LGA1156 é incompatível com o socket LGA1155. NÃO instale uma CPU LGA1156 num socket LGA1155.

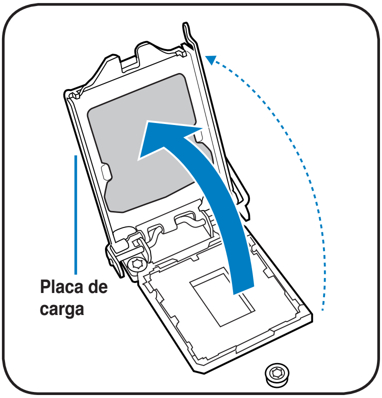
1. Localize o socket do CPU na Motherboard.
2. Certifique-se de que não remove a tampa PnP do socket da CPU antes de instalar a CPU



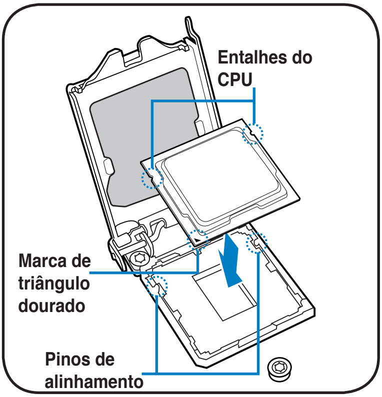
3. Pressione a alavanca de carregamento com o polegar (A), depois desloque-a para a direita (B) até que esta seja libertada da aba de retenção.



4. Levante a alavanca de carregamento na direcção da seta até que a placa de carregamento esteja completamente levantada.



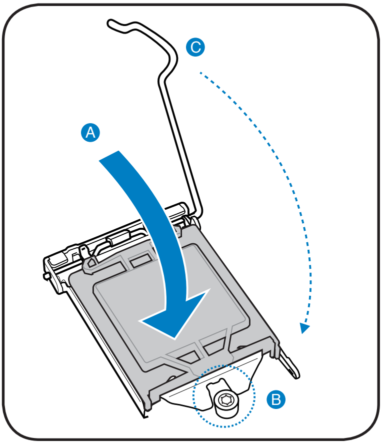
5. Coloque o CPU em cima do socket, certificando-se de que o triângulo - dourado se encontra no canto inferior esquerdo, e depois encaixe os pinos de alinhamento nos entalhes do CPU.



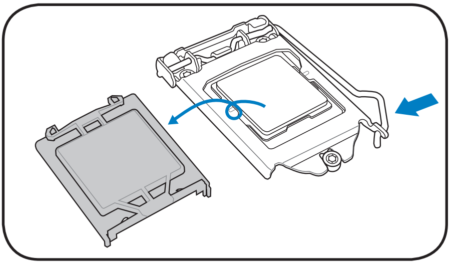
Entalhes do CPU
Marca de triângulo dourado
Pinos de alinhamento

O CPU encaixa apenas numa orientação correcta. NÃO force o encaixe do CPU no socket para evitar dobrar os conectores do socket e danificar o CPU!

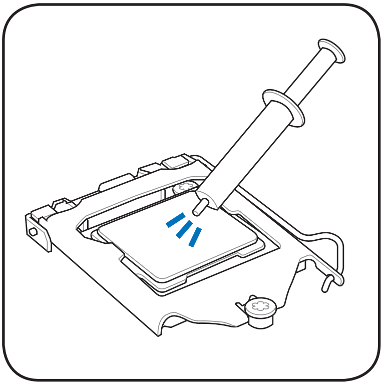
6. Feche a placa de carregamento (A) assegurando-se de que a extremidade frontal da placa de carregamento desliza para debaixo do pino de retenção (B). De seguida pressione a alavanca de carregamento (C).



7. Insira a alavanca de carregamento por baixo da aba de retenção para remover a tampa PnP do socket da CPU.



8. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



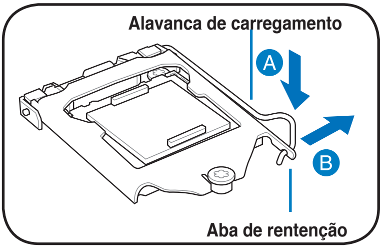
Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

1.1.5 Socket Intel® LGA1155 (Tampa PnP por baixo da placa de carregamento)

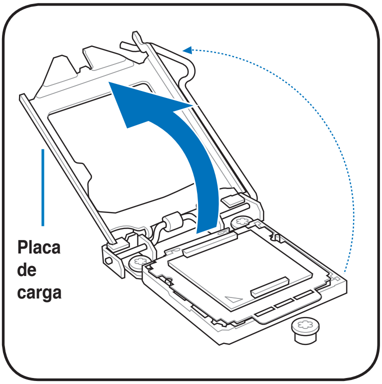
A CPU LGA1156 é incompatível com o socket LGA1155. NÃO instale uma CPU LGA1156 num socket LGA1155.

1. Localize o socket do CPU na Motherboard.
2. Pressione a alavanca de carregamento com o polegar (A), depois desloque-a para a direita (B) até que esta seja libertada da aba de retenção.

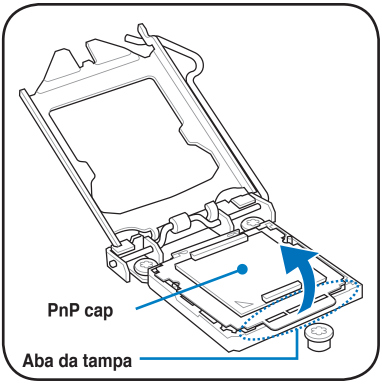

Alavanca de carregamento
A
B
Aba de rentenção

Para evitar danos nos pinos do socket, não remova a tampa PnP a não ser que seja para instalar um CPU.

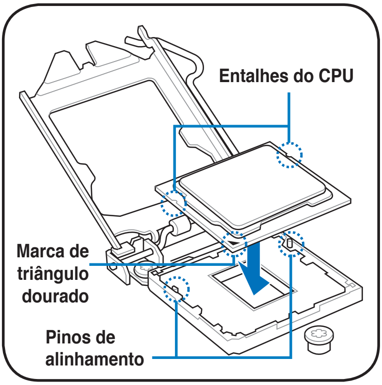
3. Levante a alavanca de carregamento na direcção da seta até que a placa de carregamento esteja completamente levantada.


Placa
de
carga

4. Remova a tampa PnP do socket do CPU levantando a aba.

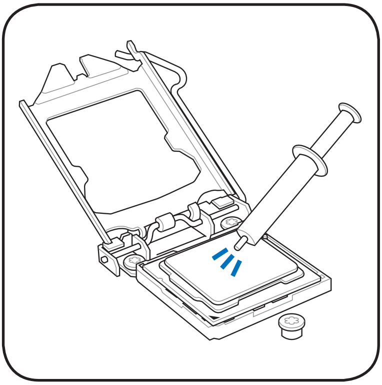

PnP cap
Aba da tampa

5. Coloque o CPU em cima do socket, certificando-se de que o triângulo - dourado se encontra no canto inferior esquerdo, e depois encaixe os pinos de alinhamento nos entalhes do CPU.



O CPU encaixa apenas numa orientação correcta. NÃO force o encaixe do CPU no socket para evitar dobrar os conectores do socket e danificar o CPU!

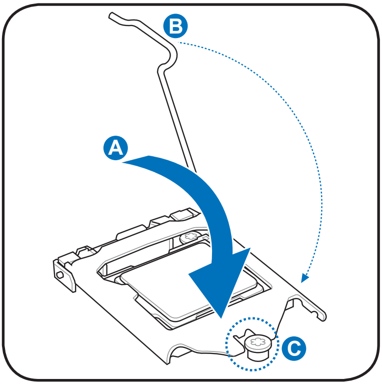
6. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



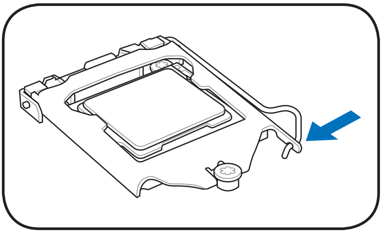
Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

7. Feche a placa de carregamento (A), e depois pressione a alavanca de carregamento (B), assegurando-se de que a extremidade frontal da placa carregamento desliza para debaixo do pino de retenção (C).



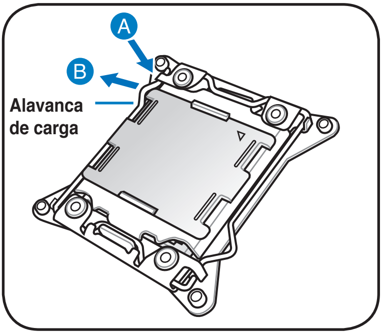
8. Insira a alavanca de carregamento debaixo da aba de retenção.



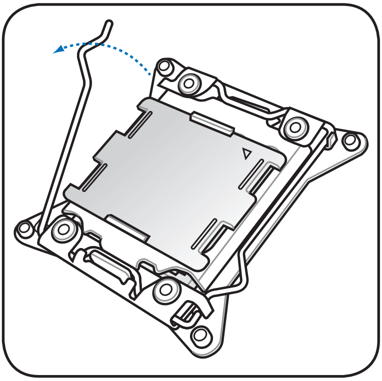
1.1.6 Socket Intel® LGA2011

1. Procure o socket do CPU na Motherboard.
2. Exerça pressão sobre a alavanca com o seu polegar (A) e de seguida mova-a para a esquerda (B) até ficar liberta da patilha de fixação.

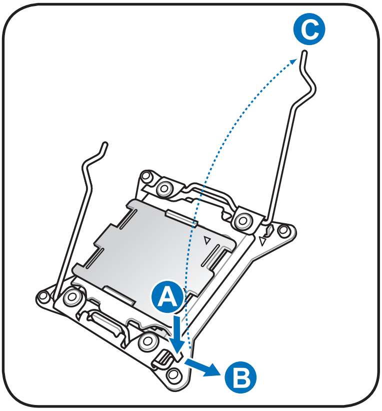
Para evitar danificar os pinos do socket, não remova a tampa PnP a não ser que esteja a instalar um CPU.



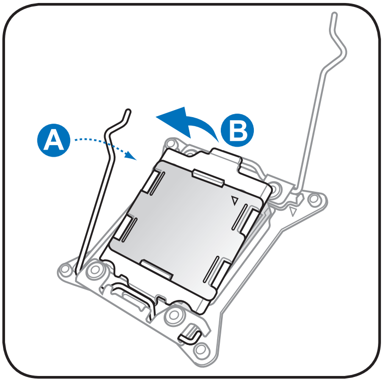
3. Levante ligeiramente a alavanca de carga na direcção da seta.



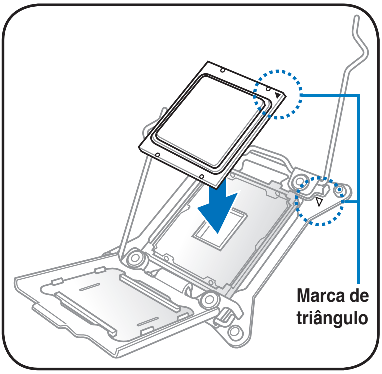
4. Feche a placa de carregamento (A), e depois pressione a alavanca de carregamento (B), assegurando-se de que a extremidade frontal da placa carregamento desliza para debaixo do pino de retenção (C). Levante ligeiramente a alavanca de carga na direcção da seta (C).



5. Pressione a alavanca de carga da esquerda (A) para levantar a placa de carregamento (B).

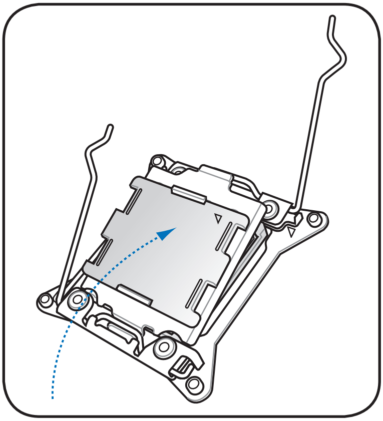


6. Coloque a CPU sobre o socket, certificando-se de que a marca do triângulo se encontra no canto superior direito do socket.

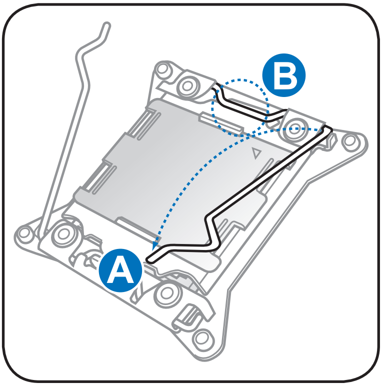


O CPU encaixa apenas numa direcção. NÃO force a entrada do CPU no socket para evitar dobrar os conectores existentes no mesmo e danificar a CPU!

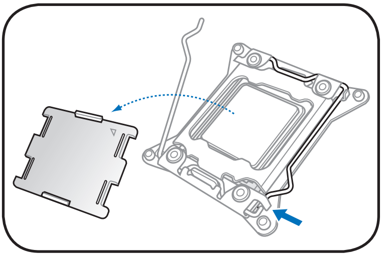
7. Feche a placa de carga.



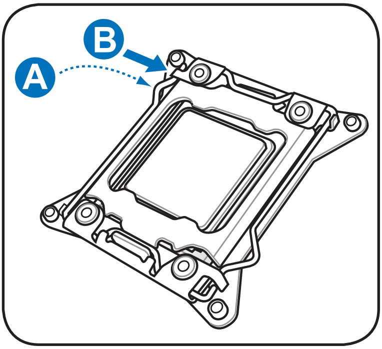
8. Pressione a alavanca de carga da direita (A), certificando-se de que a extremidade da placa de carga está fixa pela alavanca (B).



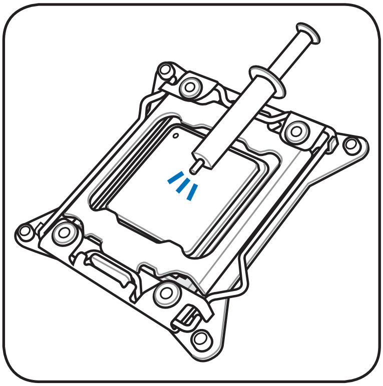
9. Insira a alavanca de carga da direita debaixo da aba de retenção. Remova a tampa PnP do socket CPU.



10. Pressione a alavanca de carga da esquerda (A) e depois insira a alavanca debaixo da aba de retenção (B)..



11. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.

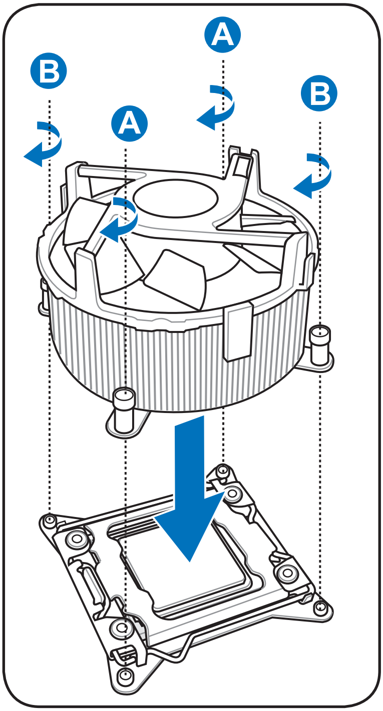


Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

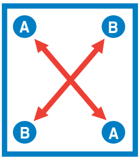
O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

12. Coloque o dissipador de calor na parte superior da CPU instalada, garantindo que os quatro fixadores coincidem com os orifícios no socket da CPU.

13. Aperte os quatro parafusos com um chave Philips (chave de cruz), apenas o suficiente para fixar o dissipador ao socket da CPU. Quando os quatro parafusos estiverem colocados, aperte-os para fixar completamente o dissipador.



Aperte os quatro parafusos do dissipador em sequência diagonal.

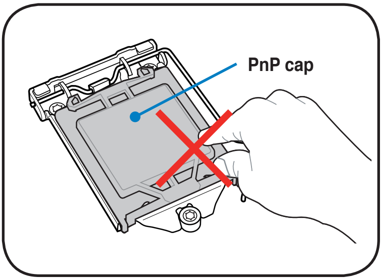


1.1.7 Socket Intel® LGA1150 (Tampa PnP por baixo da placa de carregamento)

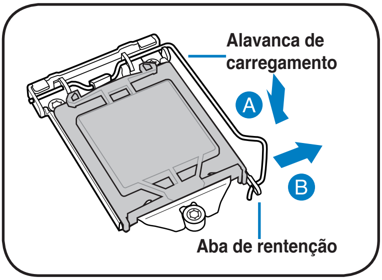
Certifique-se de que instala a CPU correcta concebida apenas para o socket LGA1150. NÃO instale uma CPU concebida para os sockets LGA1155 e LGA1156 no socket LGA1150.

1. Procure o socket do CPU na Motherboard.

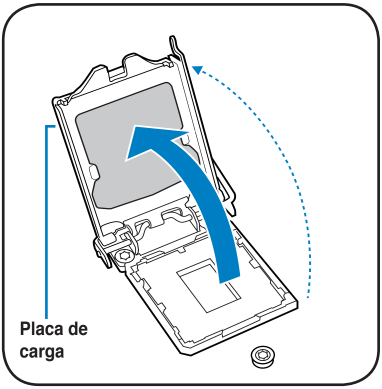
NÃO remova já a tampa PnP do socket da CPU. Se o fizer, poderá dobrar os pinos do socket. Consulte a localização da tampa PnP na ilustração seguinte.



2. Pressione a alavanca de carregamento com o polegar (A), depois desloque-a para a direita (B) até que esta seja libertada da aba de retenção.

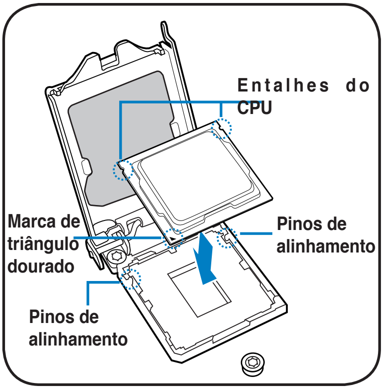


3. Levante a alavanca de carregamento na direcção da seta até que a placa de carregamento esteja completamente levantada.

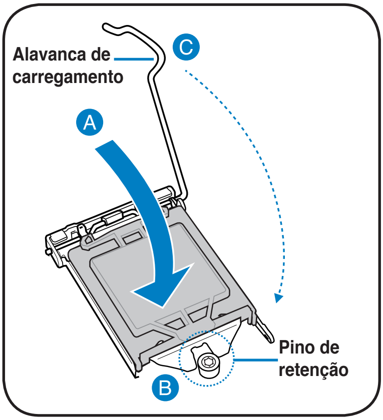


4. Coloque o CPU em cima do socket, certificando-se de que o triângulo - dourado se encontra no canto inferior esquerdo, em seguida, encaixe os entalhes da CPU nos pinos de alinhamento do socket.

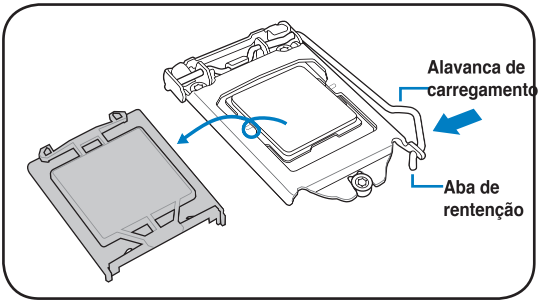
O CPU encaixa apenas numa orientação correcta. NÃO force o encaixe do CPU no socket para evitar dobrar os conectores do socket e danificar o CPU!


Entalhes do CPU
Marca de triângulo dourado
Pinos de alinhamento
Pinos de alinhamento

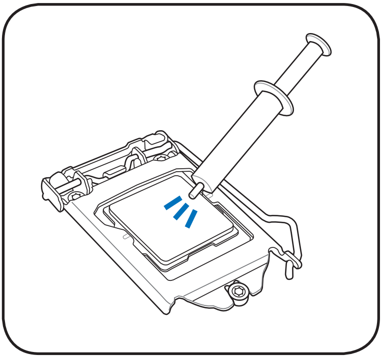
5. Feche a placa de carregamento (A) assegurando-se de que a extremidade frontal da placa de carregamento desliza para debaixo do pino de retenção (B). De seguida pressione a alavanca de carregamento (C).


Alavanca de carregamento
C
A
Pino de retenção
B

6. Insira a alavanca de carregamento por baixo da aba de retenção para remover a tampa PnP do socket da CPU.


Alavanca de carregamento
Aba de rentenção

7. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

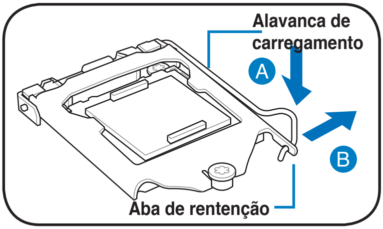
O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

1.1.8 Socket Intel® LGA1150 (Tampa PnP por baixo da placa de carregamento)

Certifique-se de que instala a CPU correcta concebida apenas para o socket LGA1150. NÃO instale uma CPU concebida para os sockets LGA1155 e LGA1156 no socket LGA1150.

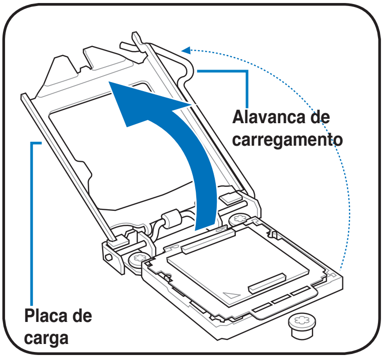
1. Localize o socket do CPU na Motherboard.

2. Pressione a alavanca de carregamento com o polegar (A), depois desloque-a para a direita (B) até que esta seja libertada da aba de retenção.

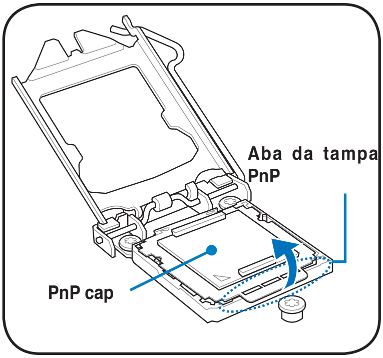

Alavanca de carregamento
A
B
Aba de rentenção

NÃO remova já a tampa PnP do socket da CPU. Se o fizer, poderá dobrar os pinos do socket.

3. Levante a alavanca de carregamento na direcção da seta até que a placa de carregamento esteja completamente levantada.

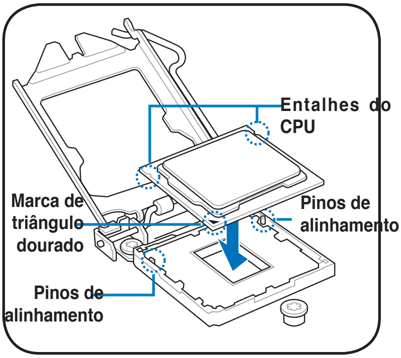

Alavanca de carregamento
Placa de carga

4. Remova a tampa PnP do socket do CPU levantando a aba.


Aba da tampa PnP
PnP cap

5. Coloque o CPU em cima do socket, certificando-se de que o triângulo - dourado se encontra no canto inferior esquerdo, encaixe os entalhes da CPU nos pinos de alinhamento do socket.

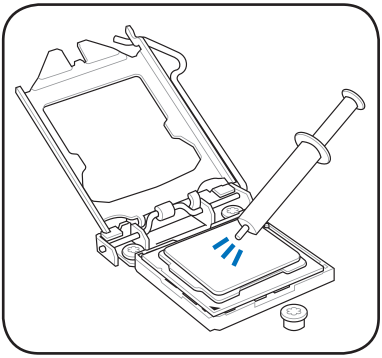
O CPU encaixa apenas numa orientação correcta. NÃO force o encaixe do CPU no socket para evitar dobrar os conectores do socket e danificar o CPU!


Entalhes do CPU
Marca de triângulo dourado
Pinos de alinhamento
Pinos de alinhamento

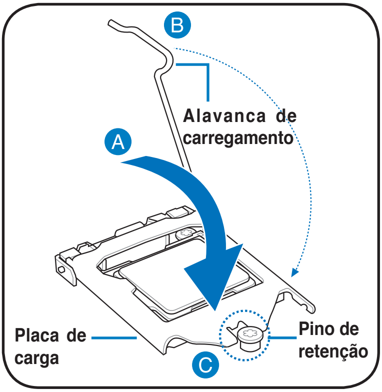
6. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.

Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

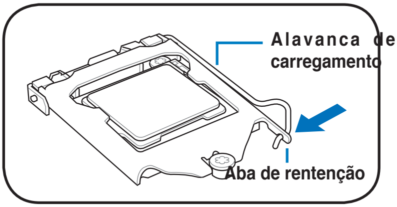
O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.



7. Feche a placa de carregamento (A), e depois pressione a alavanca de carregamento (B), assegurando-se de que a extremidade frontal da placa carregamento desliza para debaixo do pino de retenção (C).


B
Alavanca de carregamento
A
Placa de carga
C
Pino de retenção

8. Insira a alavanca de carregamento debaixo da aba de retenção.

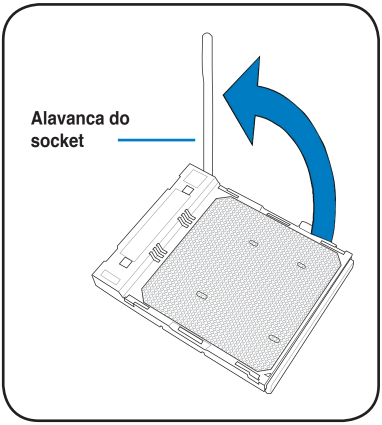

Alavanca de carregamento
Aba de rentenção

1.1.9 Socket AMD AM2 / AM2+ / AM3

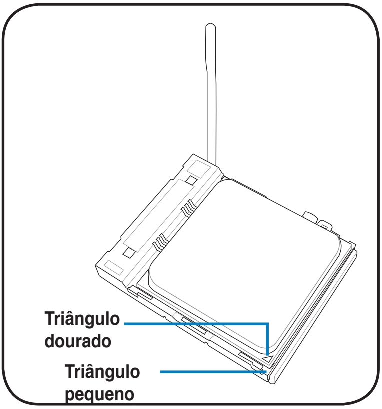
- Os sockets AMD AM2 e AM2+ são compatíveis com processadores AMD AM2, AM2+ e AM3.
- O socket AMD AM3 é compatível com processadores AMD AM3. NÃO instale um processador AMD AM2+ / AM2 no socket AM3. Apenas alguns modelos de placas principais AM3 suportam processadores AM3+ através de uma actualização do BIOS. Para obter mais detalhes, consulte o site de suporte da ASUS.

1. Procure o socket do CPU na Motherboard.
2. Solte o socket premindo a alavanca para o lado, de seguida levante num ângulo de 90º.

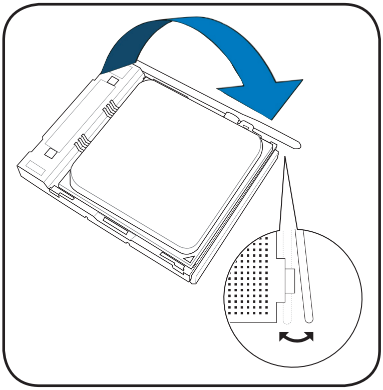
Certifique-se de que o socket é levantado num ângulo de 90º. Caso contrário, o CPU não ficará correctamente encaixada.



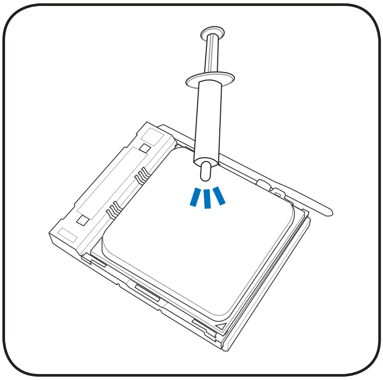
3. Posicione o CPU por cima do socket de forma a que o canto do CPU com o triângulo dourado fique alinhado com o canto do socket contendo um pequeno triângulo.
4. Introduza cuidadosamente o CPU no socket até encaixar no devido lugar.



5. Quando o CPU estiver devidamente posicionada, exerça pressão sobre a alavanca do socket para fixar o CPU. A alavanca emite um estalido ao encaixar na patilha lateral para indicar que está devidamente fixa.



6. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



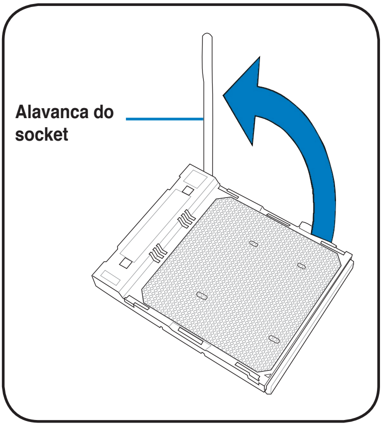
Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

1.1.10 Socket AMD AM3+

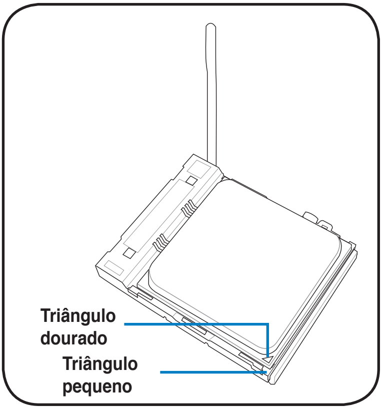
O socket AMD AM3+ é compatível com processadores AMD AM3+ e AM3. Apenas alguns modelos de placas principais AM3 suportam processadores AM3+ através de uma actualização do BIOS. Para obter mais detalhes, consulte o site de suporte da ASUS.

1. Procure o socket do CPU na Motherboard.
2. Solte o socket premindo a alavanca para o lado, de seguida levante num ângulo de 90º.

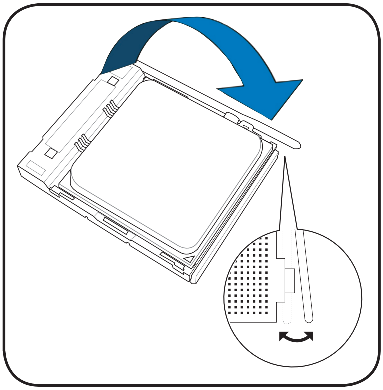


Certifique-se de que o socket é levantado num ângulo de 90º. Caso contrário, o CPU não ficará correctamente encaixada.

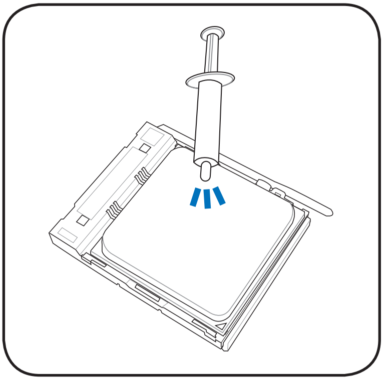
3. Posicione o CPU por cima do socket de forma a que o canto do CPU com o triângulo dourado fique alinhado com o canto do socket contendo um pequeno triângulo.
4. Introduza cuidadosamente o CPU no socket até encaixar no devido lugar.



5. Quando o CPU estiver devidamente posicionada, exerça pressão sobre a alavanca do socket para fixar o CPU. A alavanca emite um estalido ao encaixar na patilha lateral para indicar que está devidamente fixa.



6. Aplique um pouco de Material de Interface Térmica na área exposta do CPU que estará em contacto com o dissipador, espalhando-o numa camada fina e uniforme.



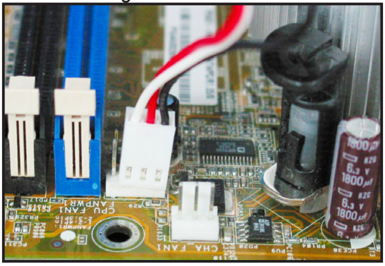
Alguns dissipadores são fornecidos com pasta térmica pré-aplicada. Se assim for, ignore este passo.

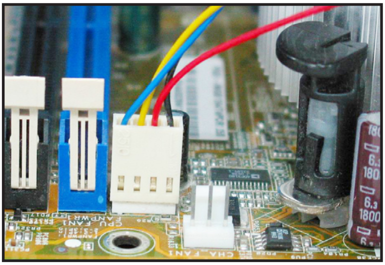
O Material de Interface Térmica é tóxico e não comestível. NÃO coma este material. Se o material entrar em contacto com os seus olhos ou pele, lave imediatamente e procura ajuda médica.

1.2 Instalação de um dissipador de calor e de uma ventoinha

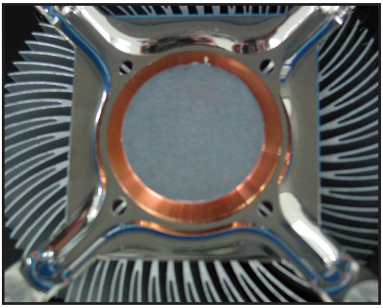
Para instalar um dissipador de calor e uma ventoinha para o CPU:

1. Seleccione um dissipador de calor e uma ventoinha devidamente certificados pela Intel ou pela AMD e tendo por base a Motherboard de que dispõe. Existem conectores de 3 pinos (à esquerda) e de 4 pinos (à direita) para a ventoinha. Apenas as ventoinhas para CPUs com conectores de 4 pinos suportam a tecnologia Q-Fan da ASUS.



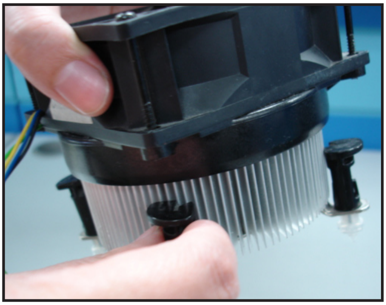


Dissipadores de calor certificados pela Intel:



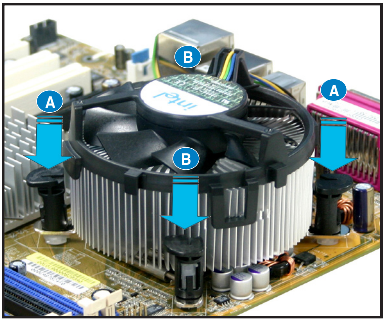
2. Alguns dissipadores de calor vêem com a massa térmica já pré-aplicada. Se tal for o caso, não remova esta massa e retire a película protectora apenas antes da instalação. Caso contrário, antes de instalar o dissipador de calor aplique várias gotas de massa térmica sobre a área exposta do CPU e com a qual o dissipador de calor vai entrar em contacto. Certifique-se de que esta massa térmica é espalhada de maneira a formar uma camada fina e uniforme.

Para evitar contaminar a massa térmica, NÃO a espalhe com os dedos.

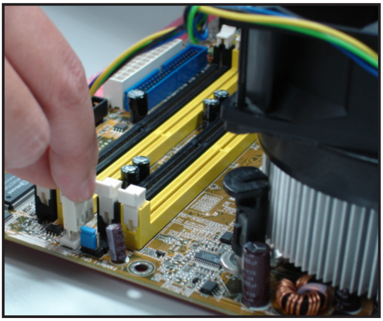


3. Oriente cada fecho com a extremidade estreita a apontar para fora.

4. Exerça pressão em simultâneo sobre dois fechos de cada vez e na diagonal de forma a fixar o dissipador de calor e a ventoinha no devido lugar.



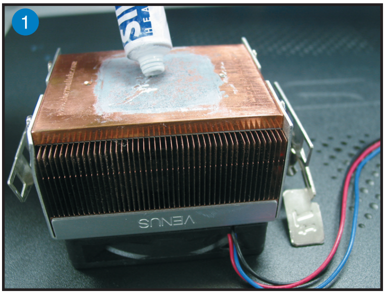
5. Ligue o cabo da ventoinha do CPU ao respectivo conector existente na Motherboard.

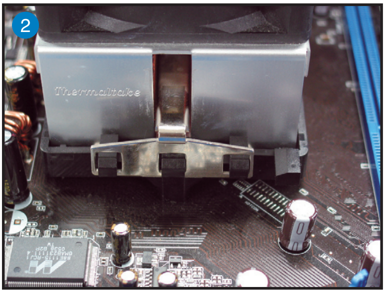


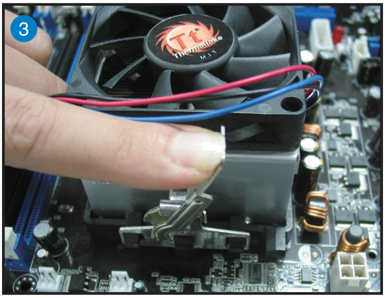
NÃO se esqueça de ligar o conector da ventoinha do CPU! Podem ocorrer erros em termos da monitorização do hardware caso não ligue este conector. Recomendamos-lhe que use um dissipador de calor omnidireccional para obter uma maior área de dissipação do calor.

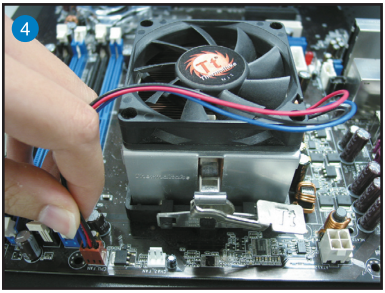
Dissipadores de calor certificados pela AMD:

Siga as instruções seguintes para instalar um dissipador de calor certificado pela AMD.







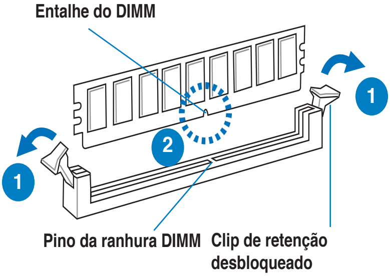


1.3 Instalar um DIMM

Desligue a fonte de alimentação antes de adicionar ou remover DIMMs ou outros componentes do sistema. Se não o fizer poderá originar danos graves na Motherboard e nos componentes.

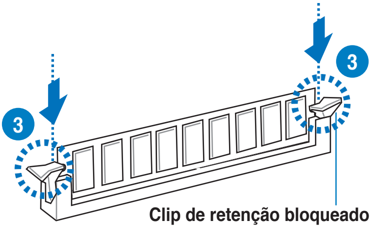
Instalar um DIMM numa ranhura DIMM com dois clips de retenção

1. Liberte uma ranhura DIMM pressionando para fora os clips de retenção.
2. Alinhe um DIMM na ranhura para que o entalhe do DIMM encaixe no pino da ranhura DIMM.



Um DIMM possui um entalhe para que encaixe apenas numa direcção. NÃO force o encaixe do módulo DIMM na direcção errada na ranhura para evitar danificar o módulo DIMM.

3. Segure o DIMM por ambas as extremidades, depois insira o DIMM na ranhura na vertical. Pressione ambas as extremidades do DIMM simultaneamente até que os clips de retenção encaixem nas ranhuras e não seja possível pressionar mais o DIMM, para garantir a correcta instalação do módulo DIMM.

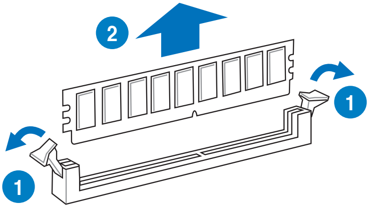


Insira o DIMM sempre na VERTICAL para evitar danos no entalhe do DIMM.

- Para instalar dois ou mais DIMMs, consulte o manual do utilizador incluído na embalagem a Motherboard.
- Consulte a lista de fornecedores licenciados de módulos de memória no manual do utilizador.

Remover um DIMM de uma ranhura DIMM com dois clips de retenção

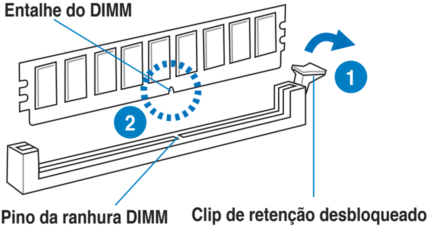
1. Pressione simultaneamente os clips de retenção para fora para desbloquear o DIMM.
2. Remova o DIMM da ranhura.



Segure o DIMM com os dedos ao pressionar os clips de retenção. O DIMM poderá danificar-se se for retirado com força excessiva.

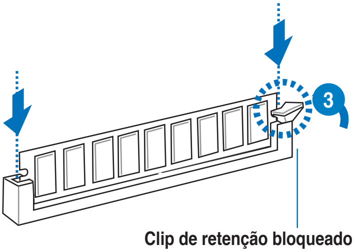
Instalar um DIMM numa ranhura DIMM com um clip de retenção

1. Liberte uma ranhura DIMM pressionando para fora os clips de retenção.
2. Alinhe um DIMM na ranhura para que o entalhe do DIMM encaixe no pino da ranhura DIMM.



Um DIMM possui um entalhe para que encaixe apenas numa direcção. NÃO force o encaixe do módulo DIMM na direcção errada na ranhura para evitar danificar o módulo DIMM.

3. Segure o DIMM por ambas as extremidades, depois insira o DIMM na ranhura na vertical. Pressione ambas as extremidades do DIMM simultaneamente até que os clips de retenção encaixem nas ranhuras e não seja possível pressionar mais o DIMM, para garantir a correcta instalação do módulo DIMM.

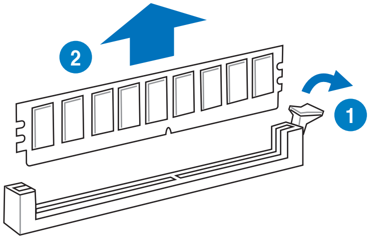


Insira o DIMM sempre na VERTICAL para evitar danos no entalhe do DIMM.

- Para instalar dois ou mais DIMMs, consulte o manual do utilizador incluído na embalagem a Motherboard.
- Consulte a lista de fornecedores licenciados de módulos de memória no manual do utilizador.

Remover um DIMM de uma ranhura DIMM com um clip de retenção

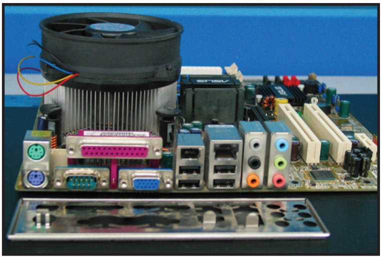
1. Pressione o clip de retenção para fora para desbloquear o DIMM.
2. Remova o DIMM da ranhura.



Segure o DIMM com os dedos ao pressionar os clips de retenção. O DIMM poderá danificar-se se for retirado com força excessiva.

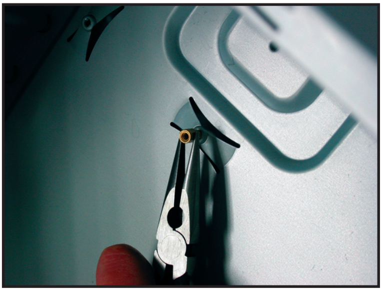
1.4 Instalação da Motherboard

1. As portas I/O variam conforme as placas principais. Utilize e instale apenas o espelho I/O que vem incluído na embalagem da Motherboard.

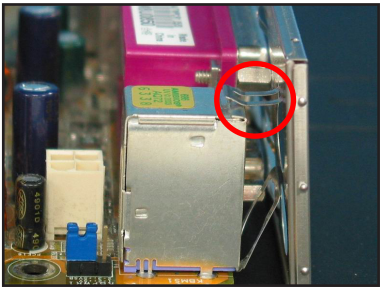


Algumas arestas e extremidades pontiagudas podem causar ferimentos. Recomendamos-lhe que utilize luvas fortes ao instalar a Motherboard e o espelho I/O.

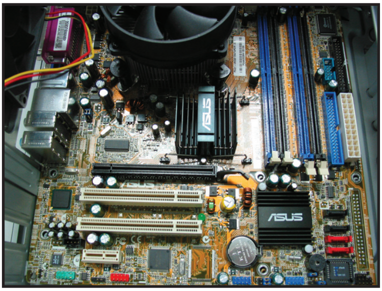
2. Instale os suportes nos respectivos orifícios existentes na placa metálica.



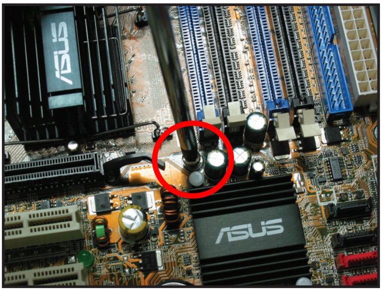
3. As molas existentes nas extremidades do espelho I/O podem danificar as portas I/O. Tenha cuidado ao instalar o espelho I/O.



4. Posicione a parte da Motherboard com as portas I/O virada para a parte de trás do chassis e encaixe a Motherboard neste.



5. Introduza e aperte ligeiramente cada parafuso seguindo uma sequência diagonal. Depois de ter introduzido todos os parafusos, aperte-os bem.



- I Antes de instalar a Motherboard remova as tampas metálicas das ranhuras para as placas de expansão existentes na parte de trás do chassis. No caso de alguns chassis, pode tornar-se difícil remover as placas das ranhuras de expansão depois da instalação.
- NÃO aperte demasiado os parafusos. Se o fizer, pode danificar a Motherboard.

1.5 Instalação da fonte de alimentação

Existem dois tipos de fontes de alimentação que são geralmente utilizadas. Uma inclui a especificação PFC (Power Factor Correction) activa e a outra inclui a especificação PFC passiva.

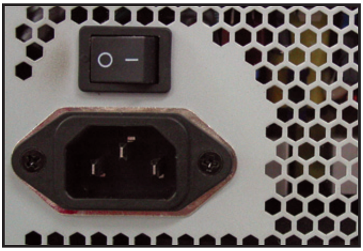
1. Seleccione um tipo de fonte de alimentação.

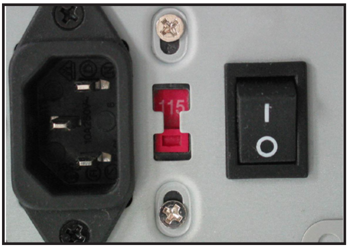
Fonte de alimentação PFC passiva:

A fonte de alimentação PFC passiva requer que o utilizador ajuste manualmente a entrada da voltagem a.c.

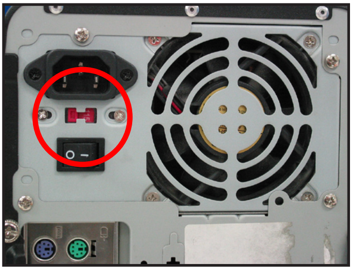
Fonte de alimentação PFC activa:

A fonte de alimentação PFC activa ajusta automaticamente a entrada de voltagem a.c.





2. Se estiver a usar uma fonte de alimentação PFC passiva, ajuste a entrada de voltagem a.c. segundo a área onde se encontra.



Se não ajustar correctamente a entrada de voltagem a.c. poderá danificar seriamente o sistema.

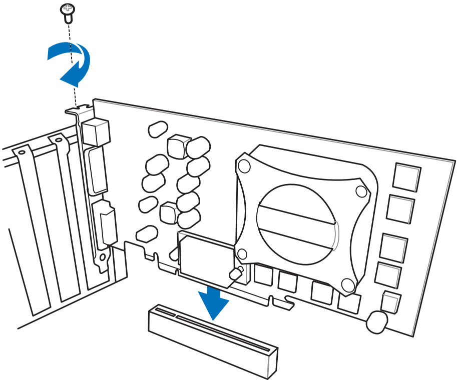
Utilize apenas fontes de alimentação devidamente certificadas. A utilização de fontes de alimentação não certificadas pode causar danos na Motherboard e noutros componentes. Consulte o guia do utilizador da fonte de alimentação para ter a certeza de que esta satisfaz os requisitos da Motherboard.

1.6 Instalação da placa de expansão

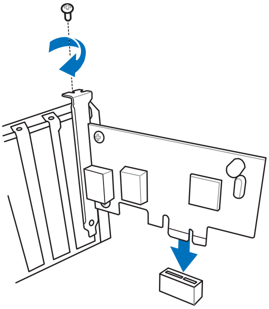
Para instalar uma placa de expansão:

1. Remova a tampa metálica que se encontra em frente da ranhura onde pretende instalar a placa de expansão.
2. Instale a placa de expansão e certifique-se de que esta está devidamente encaixada na ranhura.
3. Fixe a placa apertando os parafusos.
4. Repita as etapas anteriores para instalar uma outra placa de expansão.

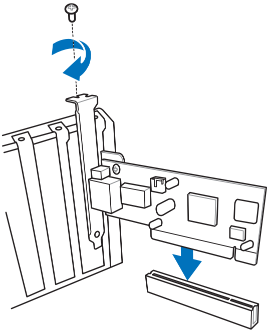
Placa PCIE x16



Placa PCIE x1



Placa PCI

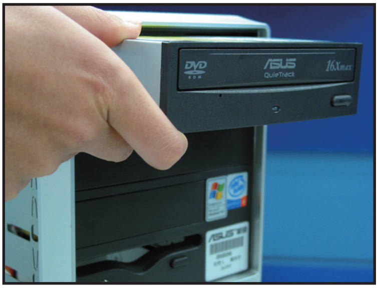


- Consulte a documentação da placa para obter mais informações sobre a configuração e consulte também o guia do utilizador da Motherboard caso necessite de configurar quaisquer jumpers após a instalação da placa de expansão.
- Consulte o guia de utilizador da Motherboard para mais instruções sobre a ligação dos cabos de sinal da placa de expansão.

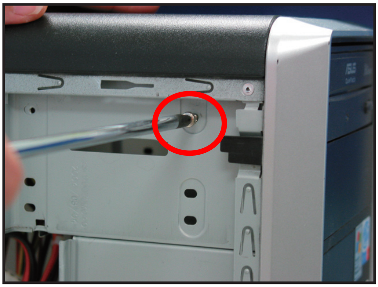
1.7 Instalação das unidades

1.7.1 Unidade óptica PATA

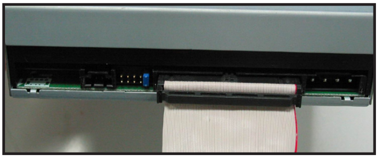
1. Remova a tampa e faça deslizar a unidade óptica para o interior do compartimento.



2. Alinhe os orifícios com os parafusos e aperte-os para fixar a unidade.

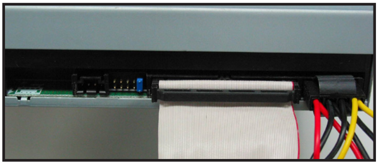


3. Oriente e ligue o cabo IDE à unidade óptica. A risca vermelha existente no cabo IDE corresponde ao pino 1 e deve ficar alinhada com a marcação de pino 1 existente na unidade óptica.

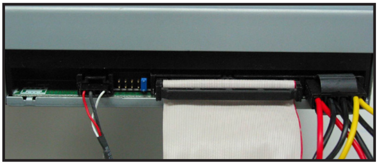


Os cabos IDE apenas podem ser ligados ao respectivo conector. Nunca force a entrada de um cabo IDE num conector.

4. Ligue o cabo de alimentação de 4 pinos à unidade óptica.

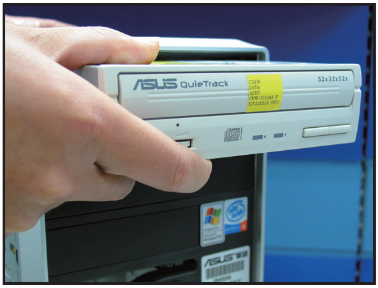


5. Ligue o cabo de áudio ao conector respectivo existente na unidade óptica.

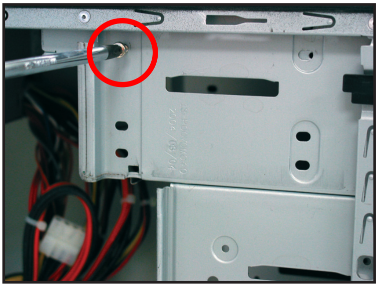


1.7.2 Unidade óptica SATA

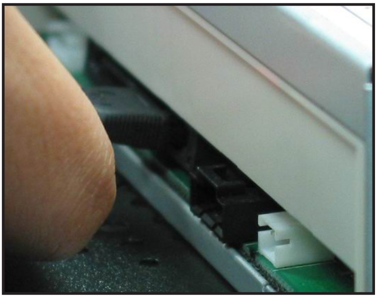
1. Remova a tampa e faça deslizar a unidade óptica para o interior do compartimento.



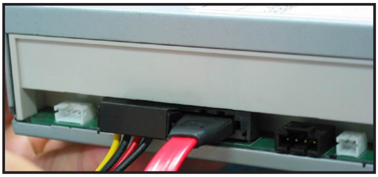
2. Alinhe os orifícios com os parafusos e aperte-os para fixar a unidade.



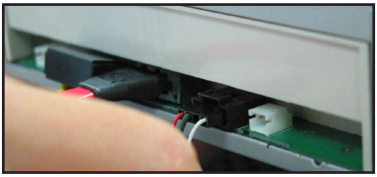
3. Oriente e ligue o cabo SATA à unidade óptica. Os cabos SATA apenas podem ser ligados ao respectivo conector. Nunca force a entrada de um cabo SATA num



4. Ligue o cabo de alimentação SATA à unidade óptica.

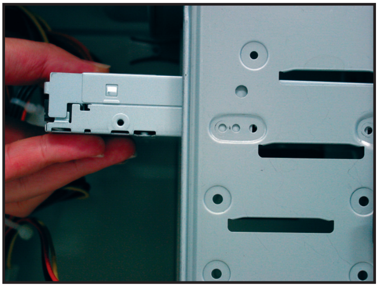


5. Ligue o cabo de áudio ao conector respectivo existente na unidade óptica.

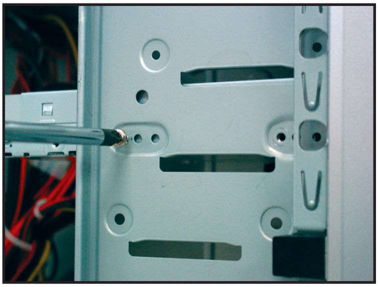


1.7.3 Unidade de disquetes

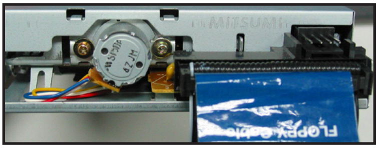
1. Remova a tampa e faça deslizar a unidade de disquetes para o interior do compartimento.



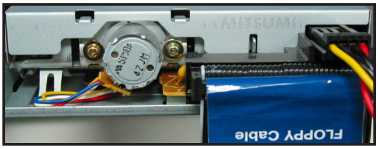
2. Alinhe os orifícios com os parafusos e aperte-os para fixar a unidade.



3. Oriente e ligue o cabo da interface de disquetes à unidade de disquetes. A risca vermelha existente no cabo corresponde ao pino 1 e deve ficar alinhada com a marcação de pino 1 existente na unidade de disquetes.

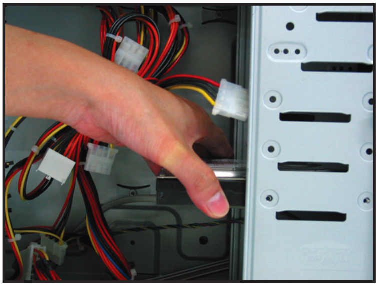


4. Ligue o cabo de alimentação da unidade de disquetes ao respectivo conector existente na parte de trás desta unidade.



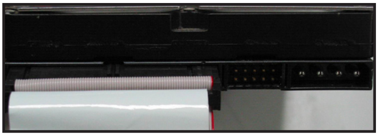
1.7.4 Unidade de disco rígido PATA

1. Introduza a unidade de disco rígido PATA no respectivo compartimento.

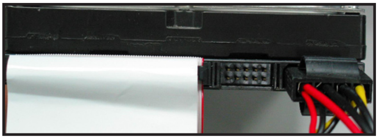


2. Alinhe os orifícios com os parafusos e aperte-os para fixar a unidade.

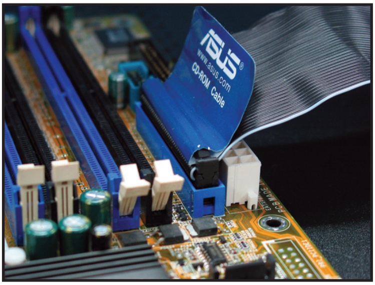
3. Oriente e ligue o cabo de sinal à unidade de disco rígido. A risca vermelha existente no cabo corresponde ao pino 1. Alinhe com o entalhe e não force a entrada do cabo no conector.



4. Ligue o cabo de alimentação de 4 pinos ao respectivo conector existente na parte de trás da unidade de disco rígido.

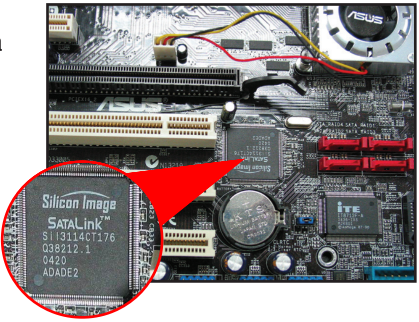


5. Ligue a outra extremidade do cabo de sinal à ranhura correspondente existente na Motherboard.



Notas para instalação da unidade de disco rígido PATA

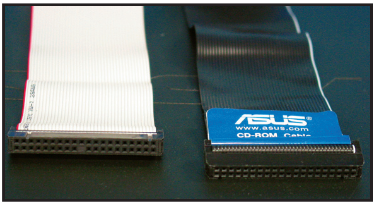
- Se o seu sistema operativo for instalado numa unidade de disco rígido controlada pela função RAID ou por outro tipo de controladores, terá de instalar primeiro o controlador na unidade de disco rígido.



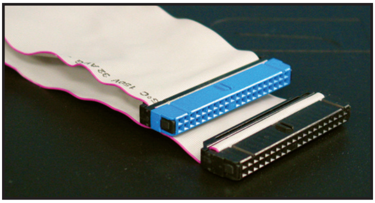
- Os conectores do cabo estão codificados por cores. O de cor azul destina-se ao conector anfitrião enquanto que o de cor negra/cinzenta se destina à unidade de disco principal/secundária.

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

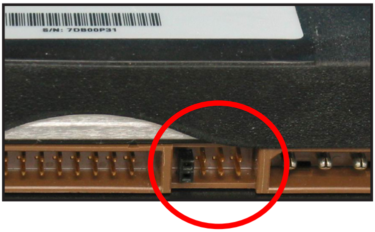
- Existem dois cabos para unidades de disco ATA IDE. O cabo mais recente com 80 fios (à direita) e o cabo mais antigo com 40 fios (à esquerda). No caso das unidades de disco ATA66/100/133, apenas os cabos com 80 fios conseguem proporcionar um melhor desempenho. Os cabos com 40 fios destinam-se geralmente às unidades ópticas.



- Os conectores do cabo estão codificados por cores. O de cor azul destina-se ao conector anfitrião enquanto que o de cor negra/cinzenta se destina à unidade de disco principal/secundária.

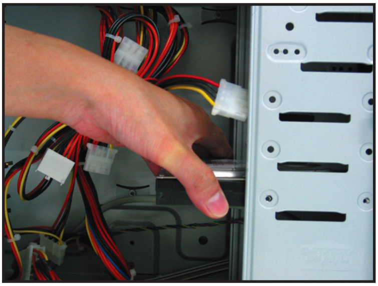


- Ao ligar dois dispositivos IDE, tem de definir os jumpers para posições diferentes. Um tem de ser definido como principal e o outro como secundário. Se estiver a usar um cabo com 80 fios, pode usar a função de selecção dos cabos.

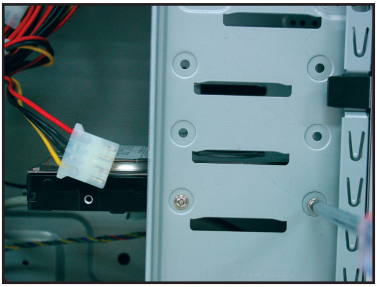


1.7.5 Unidade de disco rígido SATA

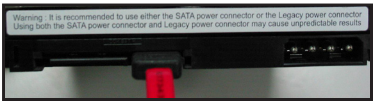
1. Introduza a unidade de disco rígido SATA no respectivo compartimento.



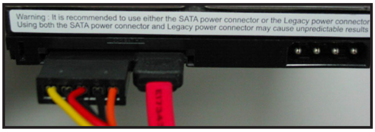
2. Alinhe os orifícios com os parafusos e aperte-os para fixar a unidade.



3. Oriente e ligue o cabo SATA à unidade de disco rígido. O cabo apenas pode ser ligado numa única direcção.

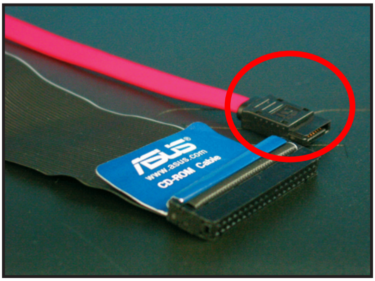

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Ligue o cabo de alimentação SATA ao respectivo conector existente na parte de trás da unidade de disco rígido.

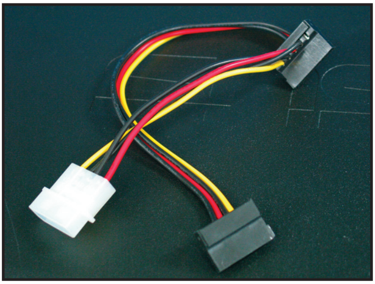

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Notas para instalação da unidade de disco rígido SATA

- A interface Serial ATA (SATA) proporciona uma maior velocidade de transmissão de dados e uma maior tolerância em termos da voltagem. O facto do cabo SATA ser um cabo estreito ajuda a evitar quaisquer problemas com a gestão dos cabos e permite uma melhor circulação de ar no interior do chassis.

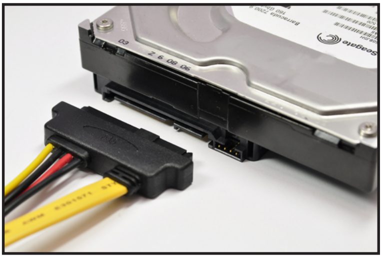

ASUS
www.asus.com
CD-ROM Cable

- O conector do cabo de alimentação SATA é diferente do tradicional conector de 4 pinos. A Motherboard da ASUS inclui cabos de alimentação que pode usar caso a sua fonte de alimentação não inclua este novo conector.

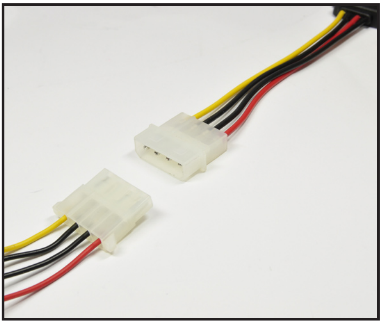


1.7.6 Unidade de disco rígido SAS

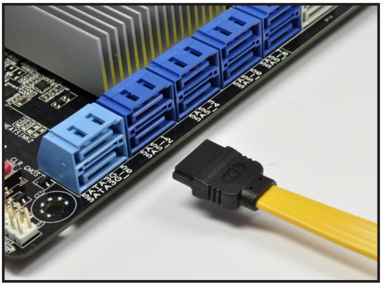
1. Oriente e ligue o cabo combinado de sinal SAS/alimentação à unidade de disco rígido. O cabo apenas pode ser ligado numa única direcção.



2. Ligue o cabo de alimentação SAS ao conector de alimentação da fonte de alimentação.



3. Ligue o cabo de sinal SAS ao conector SAS da placa principal.

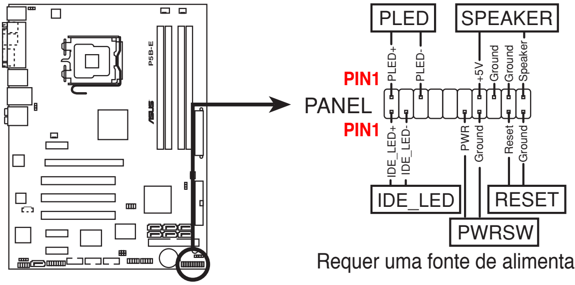

SATA3G_5
SATA3G_6
SAS_1
SAS_2
SAS_3
SAS_4
SAS_5
SAS_6
SAS_7
SAS_8
CLR_CMOS

1.8 Cabos que ligam ao painel frontal

Para ligar cabos ao painel frontal:

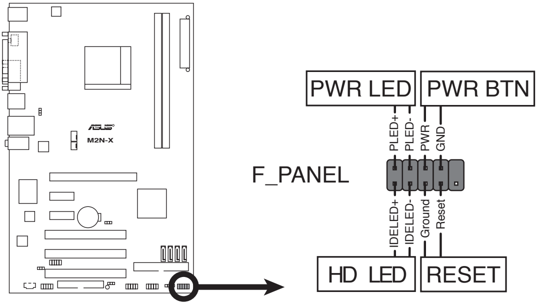
- RESET (comutador de reposição)
- PLED (LED de alimentação)
- PWRSW (Comutador de alimentação)
- IDE_LED (LED de actividade da unidade de disco rígido IDE)
- SPEAKER (conector do altifalante)

20 conector de 8 pinos existente no painel frontal


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
PIN1
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

Requer uma fonte de alimentação ATX

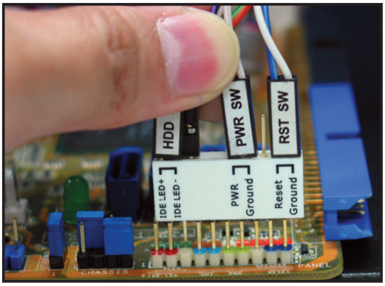
10-conector de 1 pino existente no painel frontal


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Os cabos de ligação ao painel frontal do chassis podem variar conforme os modelos. Faça a ligação destes cabos à Motherboard seguindo as indicações das respectivas etiquetas.
- Se os LEDs não acenderem e a localização dos pinos estiver correcta, pode ter trocado os pinos de terra com os pinos de sinal. Geralmente, os fios brancos correspondem aos pinos de terra e os fios coloridos correspondem aos pinos de sinal.
- Os cabos que ligam aos conectores SPEAKER (Altifalante), RESET (Repor) e PWRSW (Comutador de alimentação) existentes no painel frontal não têm nenhuma orientação específica, enquanto que os cabos IDE_LED (LED IDE) e PLED (LED de alimentação) têm. Ligue o cabo assinalado como pino 1 ao conector PIN1 da Motherboard.
- Os conectores existentes no painel frontal variam conforme o modelo da Motherboard.Consulte o guia do utilizador para mais informações.

O Q-Connector da ASUS

A instalação em apenas uma etapa do Q-Connector da ASUS permite-lhe poupar tempo pois não tem de lutar contra o emaranhado de cabos que ligam ao painel frontal. Consulte o guia do utilizador para mais informações.

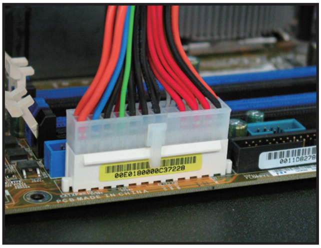


O Q-connector está disponível apenas nalguns modelos seleccionados. Consulte o guia do utilizador para mais informações.

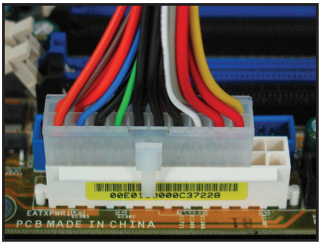
1.9 Ligação dos conectores de alimentação ATX

Os conectores de alimentação ATX encaixam apenas numa direcção. Utilize o fecho lateral para fixar os conectores à Motherboard. NÃO force a introdução dos conectores de alimentação macho nas respectivas ranhuras existentes na Motherboard. Geralmente, existem dois conectores na Motherboard: um de 24 pinos e outro de 4 pinos. Algumas fontes de alimentação mais antigas podem ter apenas um conector de alimentação de 20 pinos que também encaixa na ranhura do conector de alimentação de 24 pinos existente na Motherboard.

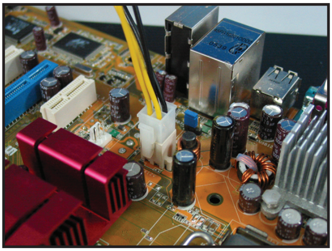
Conector de alimentação de 24 pinos



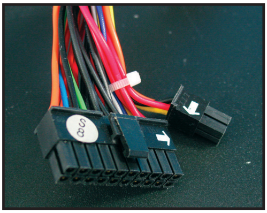
Conector de alimentação de 20 pinos (encaixa na ranhura do conector de 24 pinos)

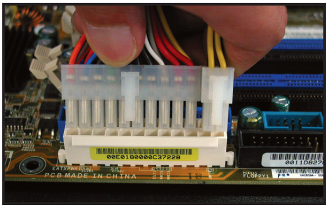


Conector de alimentação de 4 pinos



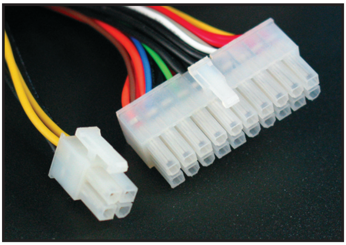
- NÃO ligue a fonte de alimentação a.c. externa quando estiver a ligar os conectores de alimentação à Motherboard.
- Certifique-se de que os conectores de alimentação estão devidamente fixos na Motherboard.
- Se a sua fonte de alimentação suportar 20 pinos + 4 pinos, pode combinar estes dois conectores e instalá-los na ranhura do conector de 24 pinos existente na Motherboard.



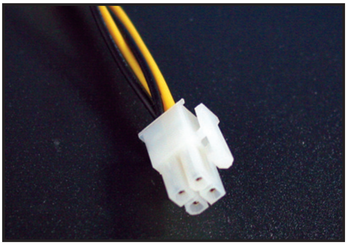


Conectores de alimentação

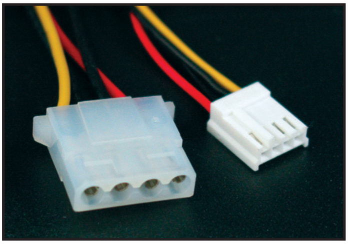
Conector de alimentação ATX de 20+4 (24) pinos



Conector de alimentação ATX de 4 pinos

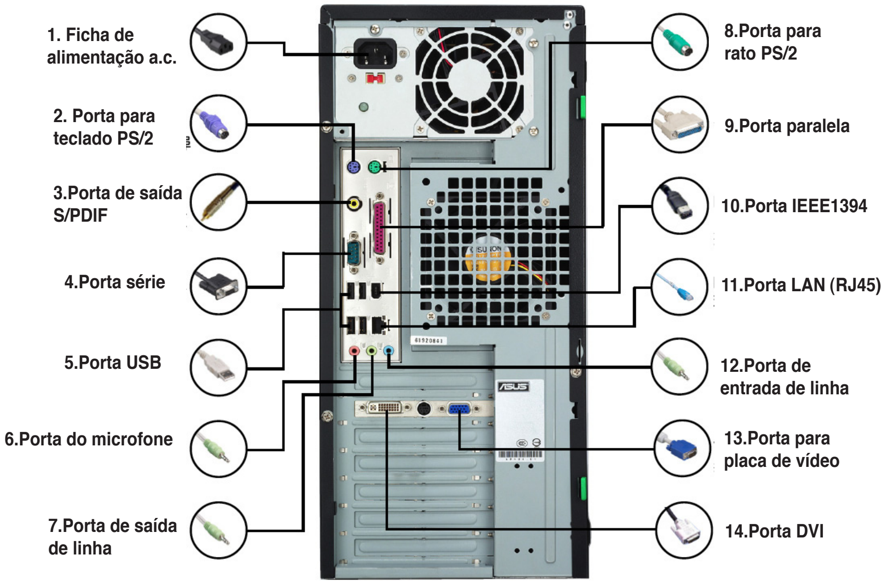


conector de alimentação de periférico (à esquerda).
conector de alimentação da unidade de disquetes (à direita)



1.10 Periféricos e acessórios

Consulte a figura em baixo para ligar os periféricos e acessórios.


1. Ficha de alimentação a.c.
2. Porta para teclado PS/2
3.Porta de saída S/PDIF
4.Porta série
5.Porta USB
6.Porta do microfone
7.Porta de saída de linha
8.Porta para rato PS/2
9.Porta paralela
10.Porta IEEE1394
11.Porta LAN (RJ45)
12.Porta de entrada de linha
13.Porta para placa de vídeo
14.Porta DVI

1. Ficha de alimentação a.c. + cabo de extensão para alimentação

2. Porta para teclado PS/2 + teclado

3. Porta de saída S/PDIF + sistema de altifalantes digitais 5.1

4. Porta série + estação de ancoragem para agenda electrónica

5. Porta USB + dispositivos USB

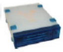
6. Porta do microfone + microfone

7. Porta de saída de linha + altifalante

8. Porta para rato PS/2 + rato

9. Porta paralela + impressora

10. Porta IEEE1394 + unidade de disco rígido externa



11. Porta LAN (RJ45) + modem

12. Porta de entrada de linha + gravador

13. Porta VGA + monitor TRC

14. Porta DVI + monitor LCD

Os conectores existentes no painel traseiro variam conforme os modelos. Consulte o guia do utilizador para mais informações.

1.11 Arranque inicial

O sistema executa as rotinas de teste ou POST. Durante estas rotinas de teste, a BIOS emite um aviso sonoro (consulte a tabela de avisos sonoros da BIOS em baixo)

Avisos sonoros da BIOS	Descrição
Um som contínuo seguido de três sons de menor duração	Não foi detectada a placa VGA
Um som contínuo seguido de dois sons de menor duração e depois uma pausa (repetida)	Não foi detectada a memória
Um som contínuo seguido de quatro sons de menor duração	Falha em termos do hardware (AMI BIOS)
Quatro sons de curta duração	Falha em termos do hardware (AWARD BIOS)

Resolução de problemas

Problema	Solução
• Não é possível ligar o computador • O LED de alimentação não está aceso. • A ventoinha da fonte de alimentação não está a funcionar.	Certifique-se de que o cabo de alimentação está devidamente ligado.
O computador está ligado mas o monitor apresenta-se negro.	• Certifique-se de que a alimentação do monitor está ligada e de que o cabo VGA está também correctamente ligado. • Ajuste o brilho e o contraste do monitor. • Desligue o computador e desligue o cabo de alimentação do mesmo. Verifique se a placa VGA foi devidamente instalada.
Não foi detectada a memória	• Certifique-se de que instalou o módulo de memória correcto • Certifique-se de que os módulos DIMM estão devidamente introduzidos no socket DIMM. • Certifique-se de que utilizou um módulo de memória que conste da lista de módulos autorizados. Consulte o guia do utilizador para mais informações.
Erro da unidade de disquetes (O LED indicador está sempre aceso ou é mostrada uma mensagem de erro no ecrã).	• Verifique a configuração da BIOS relativamente à unidade de disquetes. • Certifique-se de que os cabos da unidade de disquetes estão correctamente ligados.
Erro da unidade de disco rígido/óptica (não reconhecida ou detectada)	• Certifique-se de que os jumpers estão correctamente definidos. (Principal/ Secundário) • Verifique a configuração da BIOS relativamente à unidade de disco rígido/óptica. • Certifique-se de que os cabos do dispositivo estão devidamente ligados. • Certifique-se de que os controladores do dispositivo estão instalados.

Capítulo 2 : Gestão/actualização da BIOS

2.1 O utilitário AFUDOS

O utilitário AFUDOS permite-lhe actualizar o ficheiro da BIOS no ambiente DOS utilizando uma disquete de arranque contendo o ficheiro actualizado da BIOS. Este utilitário permite-lhe também copiar o ficheiro da BIOS actual de forma a criar uma cópia de segurança do mesmo que pode depois ser usada em caso de falha da BIOS ou se o mesmo ficar corrompido durante o processo de actualização.

Copiar a BIOS actual

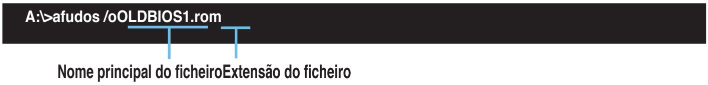
Para copiar o actual ficheiro da BIOS com o utilitário AFUDOS:

- Certifique-se de que a disquete não está protegida contra gravação e de que dispõe de pelo menos 1024 KB livres para guardar o ficheiro.
- Os ecrãs da BIOS mostrados a seguir servem apenas de referência. Os ecrãs da sua BIOS podem não ser iguais aos mostrados.

1. Copie o utilitário AFUDOS (afudos.exe) do DVD de suporte que acompanha a Motherboard para uma disquete de arranque que tenha criado antes.
2. Faça o sistema arrancar no modo DOS e digite a seguinte informação na prompt:

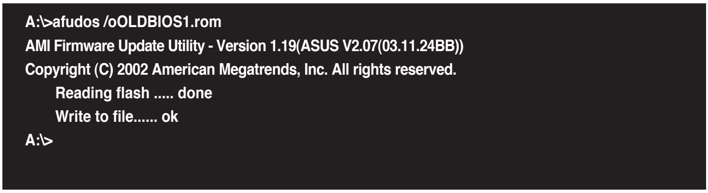
   afudos /o[nome do ficheiro]

   em que [nome do ficheiro] é o nome de ficheiro escolhido pelo utilizador não podendo este ter mais do que oito caracteres alfanuméricos caso se trate do nome de ficheiro principal e três caracteres alfanuméricos para a extensão do nome do ficheiro.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Prima <Enter>. O utilitário copia o ficheiro da BIOS actual para a disquete.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

O utilitário volta à prompt do DOS depois de ter copiado o ficheiro da BIOS.

Actualização do ficheiro da BIOS

Para actualizar o ficheiro da BIOS com o utilitário AFUDOS:

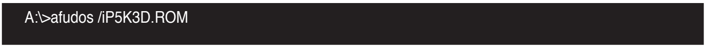
1. Visite o web site da ASUS (www.asus.com) e transfira o mais recente ficheiro da BIOS para a Motherboard.Guarde este ficheiro da BIOS numa disquete de arranque.

Escreva o nome do ficheiro da BIOS num pedaço de papel. É necessário digitar o nome exacto do ficheiro da BIOS na prompt do DOS.

2. Copie o utilitário AFUDOS (afudos.exe) do DVD de suporte que acompanha a Motherboard para uma disquete de arranque que tenha criado antes.
3. Faça o sistema arrancar no modo DOS e digite a seguinte informação na prompt:

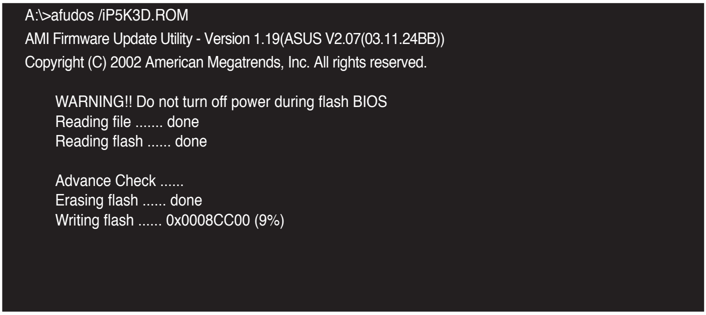
   afudos / i [nome do ficheiro]

   onde [nome do ficheiro] é o ficheiro da BIOS mais recente ou original, presente na disquete de arranque.



```
A:\>afudos /iP5K3D.ROM
```

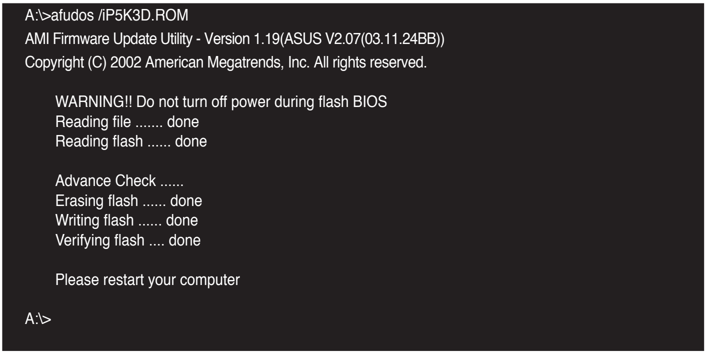
4. O utilitário verifica o ficheiro e inicia a actualização da BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

NÃO encerre ou reinicie o sistema durante a actualização da BIOS para evitar qualquer falha durante o arranque do sistema!

5. O utilitário volta à prompt do DOS depois da operação de actualização da BIOS ficar concluída. Reinicie o sistema a partir da unidade de disco rígido.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 O utilitário Award BIOS Flash

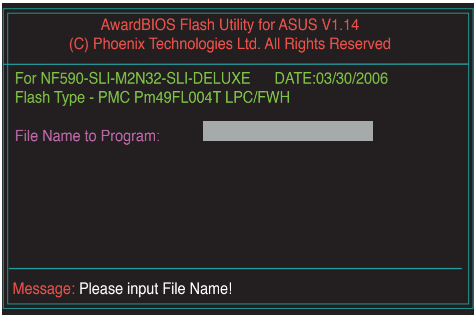
Actualização da BIOS

A BIOS (Basic Input/Output System) pode ser actualizado usando o utilitário AwardBIOS Flash. Siga as instruções seguintes para actualizar a BIOS com este utilitário.

1. Transfira o mais recente ficheiro da BIOS a partir do web site da ASUS. Mude o nome do ficheiro para M2N32SLI.BIN e guarde-o numa disquete, num CD ROM ou num disco flash USB utilizando o formato de ficheiros **FAT 16/12.**

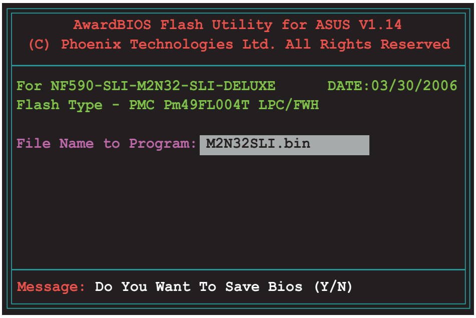
> Guarde apenas o ficheiro da BIOS actualizado no disco para evitar carregar o ficheiro errado.

2. Copie o utilitário AwardBIOS Flash (awdflash.exe) da pasta Software que encontra no CD de suporte para uma disquete, um CD-ROM ou um disco flash USB com o mais recente ficheiro da BIOS.
3. Faça o sistema arrancar em modo DOS utilizando a disquete de arranque, o CD-ROM ou um disco flash USB que tenha criado anteriormente.
4. No modo DOS, utilize <X:> (em que X é o nome atribuído ao disco) para aceder à pasta da disquete, do CD-ROM ou do disco flash USB onde guardou o ficheiro da BIOS e o utilitário AwardBIOS Flash.
5. Na promtp, digite awdflash e prima a tecla <Enter>. O ecrã do utilitário Award BIOS Flash é apresentado.



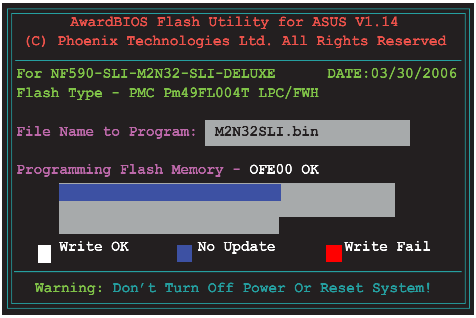
```
              AwardBIOS Flash Utility for ASUS V1.14
         (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:








Message: Please input File Name!
```

6. Digite o nome do ficheiro da BIOS no campo File Name to Program (Nome do ficheiro do programa) e prima <Enter>.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

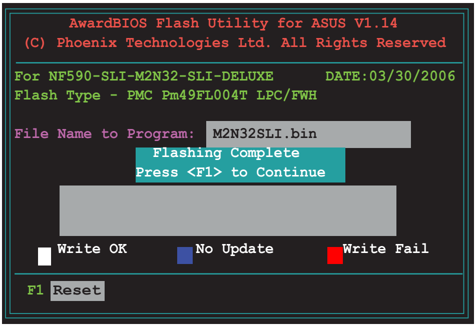
7. Prima <N> quando o utilitário lhe pedir para guardar o ficheiro actual da BIOS. O ecrã seguinte aparece.
8. O utilitário verifica o ficheiro da BIOS na disquete, no CD-ROM ou num disco flash USB e inicia a actualização do ficheiro da BIOS.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved
For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

⬜ Write OK      🟦 No Update       🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

NÃO desligue ou faça a reposição do sistema durante a operação de actualização!

9. O utilitário mostra a mensagem Flashing Complete (Actualização concluída) indicando que a actualização do ficheiro da BIOS foi feita com êxito. Remova o disco e prima <F1> para reiniciar o sistema.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved
For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                  Flashing Complete
                Press <F1> to Continue

⬜ Write OK      🟦 No Update       🟥 Write Fail

  F1 Reset
```

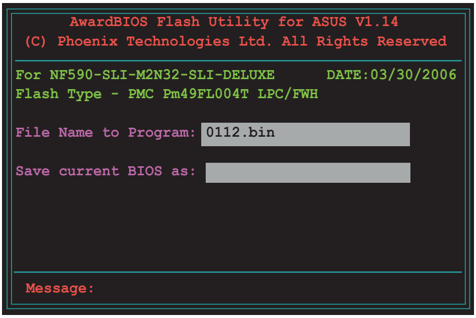
Guardar o ficheiro da BIOS actual

O utilitário AwardBIOS Flash pode ser utilizado para guardar o ficheiro da BIOS actual. Pode carregar este ficheiro da BIOS quando o ficheiro da BIOS existente ficar corrompido durante a actualização.

Certifique-se de que a disquete, o CD-ROM ou o disco flash USB dispõe de espaço suficiente para guardar o ficheiro.

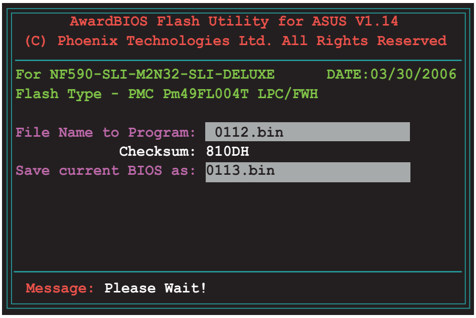
Para guardar o actual ficheiro da BIOS com o utilitário AwardBIOS Flash:

1. Siga as etapas 1 a 6 da secção anterior.
2. Prima <Y> quando o utilitário lhe pedir para guardar o ficheiro actual da BIOS. O ecrã seguinte aparece.



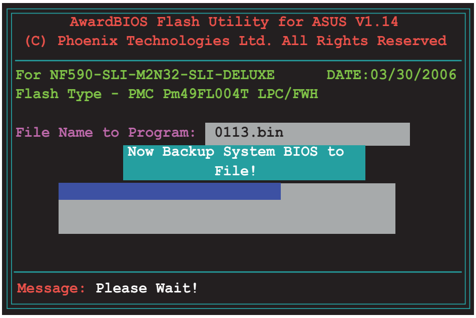
```
          AwardBIOS Flash Utility for ASUS V1.14
     (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Digite um nome de ficheiro para o ficheiro da BIOS actual no campo Save current BIOS as (Guardar BIOS actual como) e prima <Enter>.



```
          AwardBIOS Flash Utility for ASUS V1.14
     (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. O utilitário guarda o ficheiro da BIOS actual para o disco e depois volta à operação de actualização da BIOS.



```
          AwardBIOS Flash Utility for ASUS V1.14
     (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
             Now Backup System BIOS to
                       File!

Message: Please Wait!
```

2.3 O utilitário Update da ASUS

O utilitário Update da ASUS permite-lhe gerir, guardar e actualizar a BIOS da Motherboard no Windows®. O utilitário Update da ASUS permite-lhe:

- Guardar o ficheiro da BIOS actual
- Transferir o mais recente ficheiro da BIOS a partir da Internet
- Actualizar a BIOS a partir de um ficheiro da BIOS actualizado
- Actualizar a BIOS directamente a partir da Internet, e
- Ver a informação sobre a versão da BIOS.l

Este utilitário está disponível no DVD de suporte que acompanha a Motherboard.

O utilitário Update da ASUS requer uma ligação à Internet quer através de uma rede quer através de um ISP.

Instalação do utilitário Update da ASUS

Para instalar o Update da ASUS:

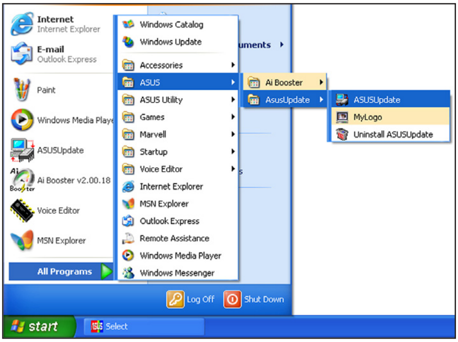
1. Introduza o DVD de suporte na unidade óptica. O menu Drivers é apresentado.
2. No menu **Main (Principal)**, clique no separador Utilities (Utilitários) e depois clique em Install ASUS Update VX.XX.XX (Instalar o Update da ASUS VX.XX.XX).
3. O utilitário Update da ASUS é assim copiado para o sistema.

Actualização da BIOS pela Internet

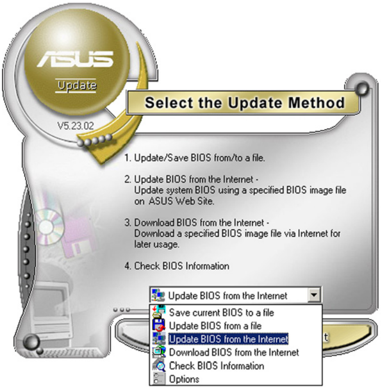
Feche todas as aplicações do Windows® antes de actualizar a BIOS com este utilitário.

Para actualizar a BIOS pela Internet:

1. Abra o utilitário Update da ASUS no ambiente de trabalho do Windows® clicando em **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate (Iniciar > Programas > ASUS > ASUSUpdate > ASUSUpdate)**. A janela principal do Update da ASUS é apresentada.

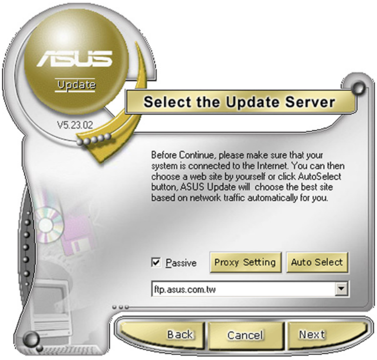

Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
uments
Log Off
Shut Down
start
Select

2. Seleccione **Update BIOS from the Internet** (**Actualizar BIOS a partir da Internet)** no menu pendente e depois clique em **Next (Seguinte)**.


ASUS
Update
V5.23.02
Select the Update Method
Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet -
Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet -
Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

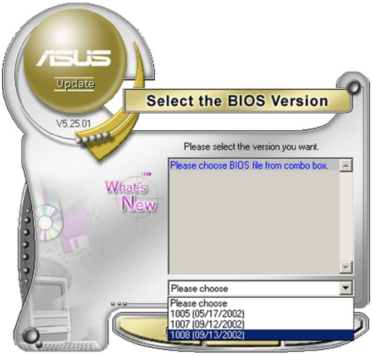
3. Seleccione o site FTP da ASUS mais próximo de si para evitar o tráfego na rede ou clique em **Auto Select (Seleccionar automaticamente)**. Clique em **Next (Seguinte)**.


ASUS
Update
V5.23.02
Select the Update Server
☑ Passive
Proxy Setting
Auto Select
Back
Cancel
Next

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

ftp.asus.com.tw

4. No site FTP, seleccione a versão da BIOS que quer transferir. Clique em **Next (Seguinte)**.


ASUS
Update
V5.25.01
Select the BIOS Version
What's New
Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

Please select the version you want.

Please choose BIOS file from combo box.

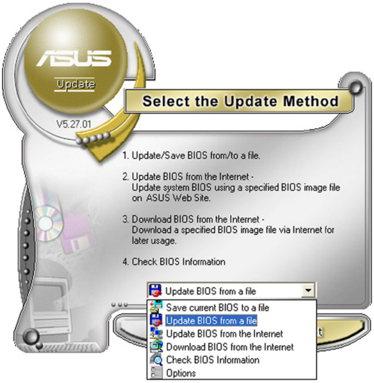
5. Siga as instruções no ecrã para concluir o processo de actualização.

O utilitário Update da ASUS é capaz de se actualizar através da Internet. Actualize sempre o utilitário para poder desfrutar de todas as suas capacidades.

Actualização da BIOS através de um ficheiro BIOS

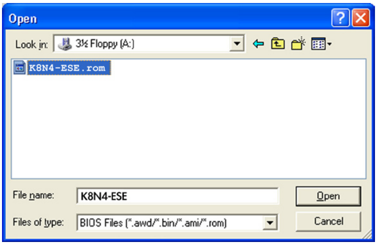
Para actualizar a BIOS através de um ficheiro BIOS:

1. Abra o utilitário Update da ASUS no ambiente de trabalho do Windows® clicando em **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate (Iniciar > Programas > ASUS > ASUSUpdate > ASUSUpdate)**. A janela principal do Update da ASUS é apresentada.


ASUS
Update
V5.27.01
Select the Update Method
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

2. Seleccione **Update BIOS from a file (Actualizar BIOS a partir de ficheiro**) no menu pendente, depois clique em **Next (Seguinte).**
3. Procure o ficheiro da BIOS na janela Open (Abrir) e clique em **Open (Abrir)**.
4. Siga as instruções no ecrã para concluir o processo de actualização.


Open
K8N4-ESE.rom
Open
Cancel

Look in: 3½ Floppy (A:)

File name: K8N4-ESE

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Carregue as predefinições da BIOS para garantir a compatibilidade e estabilidade do sistema. Seleccione o item **Load Setup Defaults (Carregar valores predefinidos)** no menu **Exit (Sair).**

2.4 ASUS BIOS Updater

A ASUS BIOS Updater permite-lhe actualizar o ficheiro da BIOS em ambiente DOS. Este utilitário permite-lhe também copiar o ficheiro da BIOS actual que poderá utilizar como cópia de segurança se ocorrer uma falha na BIOS ou se este ficar danificado durante o processo de actualização.

Os ecrãs do utilitário que se seguem servem apenas como referência. Os ecrãs reais do utilitário poderão não ser iguais aos apresentados.

Antes de actualizar a BIOS

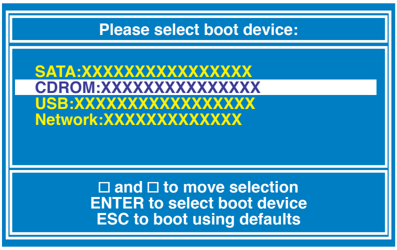
1. Prepare o DVD de suporte da Motherboard e uma unidade flash USB em formato FAT32/16 e com partição única.
2. Transfira o ficheiro da BIOS e a BIOS Updater mais recentes a partir do Web site ASUS em http://support.asus.com e guarde-os na unidade flash USB.

- O formato NTFS não é suportado em ambiente DOS. Não guarde o ficheiro da BIOS e o BIOS Updater numa unidade de disco rígido ou unidade flash USB em formato NTFS.
- Não guarde o ficheiro da BIOS numa disquete devido à baixa capacidade do disco.

3. Desligue o computador e todas as unidades de disco rígido SATA (opcional).

Arrancar o sistema em ambiente DOS

1. Insira a unidade flash USB, com o ficheiro da BIOS e a BIOS Updater mais recentes, na porta USB.
2. Arranque o seu computador. Quando o Logótipo ASUS aparecer, prima <F8> para exibir o **BIOS Boot Device Select Menu (Menu de selecção de dispositivo de arranque do BIOS)**. Insira o DVD de suporte na unidade óptica e seleccione a unidade como dispositivo de arranque.

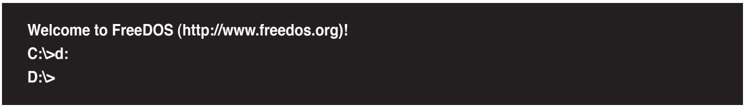


Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

☐ and ☐ to move selection
ENTER to select boot device
ESC to boot using defaults

3. Quando aparecer o menu **Make Disk (Criar disco)**, seleccione o item **FreeDOS command prompt (linha de comandos FreeDOS)** premindo o número do item.
4. Na linha de comandos FreeDOS, introduza **d:** e prima <Enter> para mudar da Unidade C (unidade óptica) para a Unidade D (unidade flash USB).



```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Efectuar a cópia de segurança da BIOS actual

Para efectuar a cópia de segurança do ficheiro da BIOS actual utilizando a BIOS Updater

Certifique-se de que a unidade flash USB não se encontra protegida contra escrita e possui espaço livre suficiente para guardar o ficheiro.

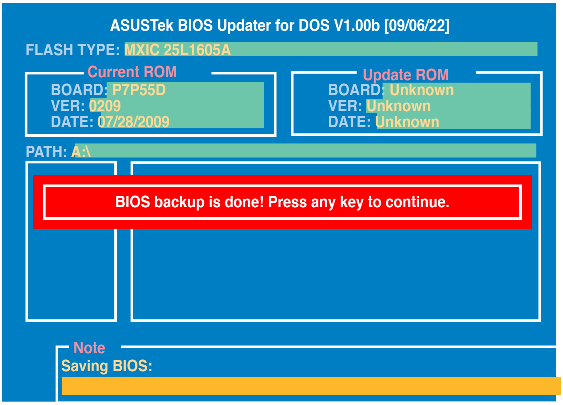
1. Na linha de comandos FreeDOS, introduza **bupdater /o[nome do ficheiro]** e prima <Enter>.

```
D:\>bupdater /oOLDBIOS1.rom
```

Nome do ficheiro **Extensão**

O [nome do ficheiro] é um nome atribuído pelo utilizador composto por um máximo de 8 caracteres alfanuméricos para o nome principal do ficheiro e três caracteres alfanuméricos para o nome da extensão.

2. O ecrã de cópia de segurança da BIOS Updater será exibido indicando o processo de cópia de segurança da BIOS. Quando a cópia de segurança da BIOS estiver concluída, prima qualquer tecla para voltar à linha de comandos do DOS.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                 Update ROM
BOARD: P7P55D               BOARD: Unknown
VER: 0209                   VER: Unknown
DATE: 07/28/2009            DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

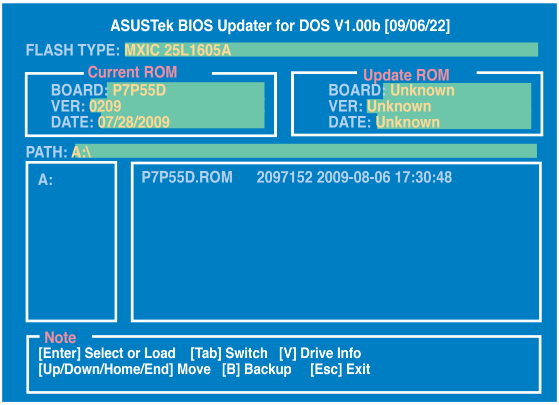
Actualizar o ficheiro da BIOS

Para actualizar o ficheiro da BIOS utilizando a BIOS Updater

1. Na linha de comandos FreeDOS, introduza **bupdater /pc /g** e prima <Enter>.

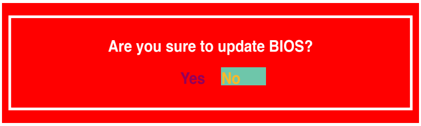
```
D:\>bupdater /pc /g
```

2. A BIOS Updater apresentará o ecrã exibido abaixo.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
   Current ROM                     Update ROM
   BOARD: P7P55D                   BOARD: Unknown
   VER: 0209                       VER: Unknown
   DATE: 07/28/2009                DATE: Unknown
PATH: A:\
 A:          P7P55D.ROM     2097152 2009-08-06 17:30:48

 Note
 [Enter] Select or Load   [Tab] Switch   [V] Drive Info
 [Up/Down/Home/End] Move  [B] Backup     [Esc] Exit
```

3. Prima a tecla <Tab> para mudar entre os campos no ecrã e utilize as teclas <Cima/Baixo/Home/End> para seleccionar o ficheiro da BIOS e prima <Enter>. O BIOS Updater verifica o ficheiro da BIOS seleccionado e pede-lhe para confirmar a actualização da BIOS.



```
Are you sure to update BIOS?
        Yes   No
```

4. Seleccione **Yes (Sim)** e prima <Enter>. Quando a actualização da BIOS estiver concluída, prima <ESC> para sair da BIOS Updater. Reinicie o computador.

NÃO desligue nem reinicie o sistema durante a actualização da BIOS para evitar falhas de arranque do sistema!

- Na versão 1.04 ou mais recente da BIOS Updater, o utilitário sai automaticamente para a linha de comandos do DOS após a actualização da BIOS.
- Carregue predefinições da BIOS para garantir a compatibilidade e estabilidade do sistema. Seleccione o item **Load Setup Defaults (Carregar valores predefinidos)** no menu **Exit (Sair)** da BIOS. Para obter mais detalhes, consulte o Capítulo 3 do manual do utilizador da Motherboard.
- Ligue todas as unidades de disco rígido SATA após a actualização do ficheiro da BIOS, caso as tenha desligado.

Capítulo 3 : Resolução de problemas

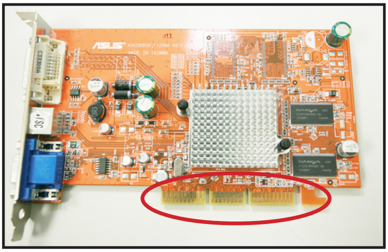
3.1 Resolução de problemas da Motherboard

Depois de ter montado o seu próprio computador, pode ter alguns problemas durante o arranque deste. Este capítulo fornece respostas para algumas perguntas comuns acerca do PC e antes de aceder ao sistema operativo. Leia este capítulo para obter soluções para problemas básicos. Isto poupa tempo pois permite-lhe resolver o problema sem ter de contactar a equipa de assistência técnica da ASUS ou devolver o produto no âmbito da garantia.

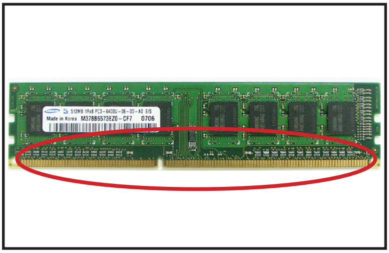
3.1.1 Resolução de problemas básicos

A. Má ligação

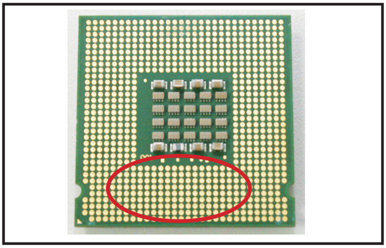
1. Certifique-se de que o contacto de cor dourada ou os pinos não estão contaminados.
2. Utilize um cotonete ou uma borracha e esfregue o contacto dourado com cuidado. Não se esqueça de remover os pedaços de borracha.



Contacto dourado da placa VGA



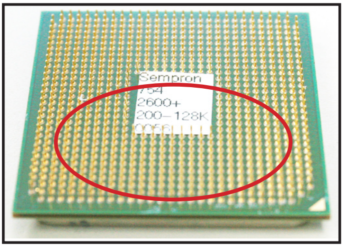
Contacto dourado do modulo DIMM



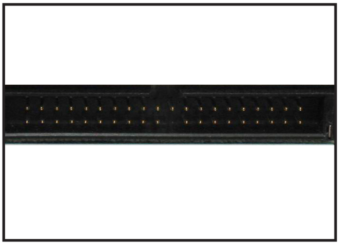
Pontos de contacto dourados do processador LGA775

Segure na placa ou no CPU pelas extremidades e NÃO toque no contacto dourado. A electricidade estática pode danificar seriamente o dispositivo.

3. Certifique-se de que os pinos do conector ou do CPU não estão partidos ou dobrados. Um pino partido ou dobrado pode levar ao mau funcionamento dos componentes. Contacte o distribuidor para mais informações.



Pinos dourados do CPU AMD

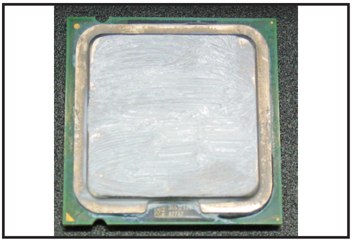


Pinos do conector

Se os pinos se partirem ou dobrarem após a compra, o vendedor pode exigir o pagamento de uma taxa para reparação do componente. Por vezes, os pinos partidos ou dobrados NÃO PODEM SER REPARADOS.

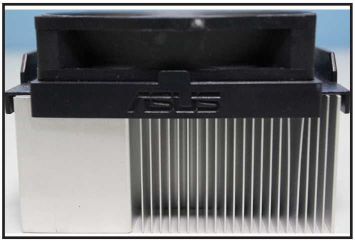
B. Sobreaquecimento do CPU

1. Limpe a superfície do CPU com um pano limpo. Aplique várias gotas de massa térmica sobre a área exposta do CPU e com a qual o dissipador de calor vai entrar em contacto. Certifique-se de que esta massa térmica é espalhada de maneira a formar uma camada fina e uniforme.

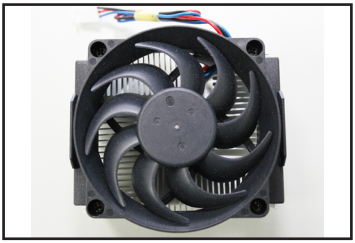


Superfície do CPU

2. Certifique-se de que o dissipador de calor e a ventoinha não estão contaminados.



Parte lateral de um dissipador de calor e de uma ventoinha



Parte de cima de um dissipador de calor e de uma ventoinha

3. Siga as instruções do fabricante do dissipador de calor e da ventoinha para limpar qualquer contaminação que possa afectar o funcionamento da ventoinha.

3.2 Outros problemas comuns

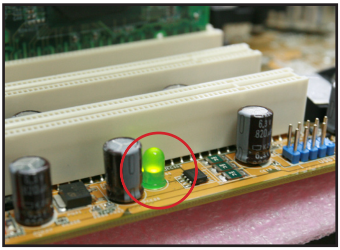
- Ao remover dispositivos do sistema, certifique-se de que todos os cabos de alimentação são desligados.
- Todas as mensagens de erro serão mostradas no ecrã durante a rotina POST (Power-On Self-Test).
- Se ouvir algum aviso sonoro da BIOS, consulte a secção 1.11 para mais informações.
- Consulte a lista seguinte para mais detalhes.

	Itens a verificar					
	LED de alimentação	**Ecrã de visualização**	**Dissipador de calor e ventoinha**	**Avisos sonoros do BIOS**	**Mensagem de erro**	**Página de referência**
Sem alimentação	Desactivado	Não	Pára	Não	N/D	3-4
Não é apresentada qualquer informação no ecrã	Activado	Não	Pára	Não	N/D	3-5
	Activado	Não	Em execução	Não	N/D	3-5
	Activado	Não	Em execução	Sim	N/D	3-5
Falha ao aceder ao sistema operativo	Activado	Sim	Em execução	Sim	Sim	3-5
	Activado	Sim	Em execução	Não	Sim	3-5
	Activado	Sim	Em execução	Não	Não	3-5

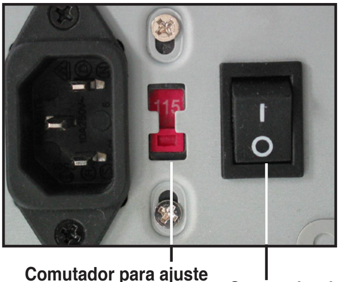
Se tiver resolvido o problema mas entretanto surgir outro, consulte a lista novamente. Se o problema persistir, entre em contacto com o vendedor ou com a equipa de assistência técnica da ASUS para mais informações.

3.2.1 Sem alimentação

As placas principais da ASUS incluem um LED de alimentação. SE o LED acender é sinal de que o sistema está activado. Se o LED não acender, siga as instruções em baixo para resolver o problema.



1. Certifique-se de que a sua fonte de alimentação está definida para a voltagem a.c. correcta utilizada na sua área e também de que a fonte de alimentação está ligada.



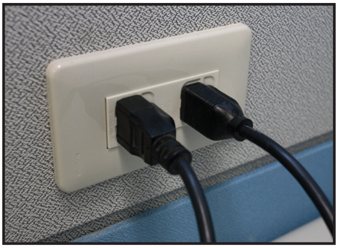
Comutador para ajuste da entrada de voltagem a.c.

Comutador de alimentação "—": ligar; "O": Desligar

- Antes de ajustar a entrada de voltagem a.c. desligue a ficha de alimentação. Se não o fizer poderá danificar seriamente a fonte de alimentação.
- Se não ajustar correctamente a entrada de voltagem a.c. poderá danificar seriamente o sistema.

2. Certifique-se de que ligou o cabo de alimentação à tomada eléctrica.

- Ligue a ficha à tomada eléctrica. NÃO ligue a ficha a uma extensão, UPS ou outros dispositivos.
- Utilize as fichas de alimentação do sistema e do monitor para verificar se a tomada eléctrica está a funcionar normalmente.



3. Se o problema persistir, pode ter de contactar o vendedor para obter uma fonte de alimentação nova. Se a fonte de alimentação estiver a funcionar bem, contacte o vendedor de placas principais da ASUS para que a placa seja reparada no âmbito da garantia.

3.2.2 Falha no arranque, não é apresentada informação no ecrã

A maior parte das falhas durante o arranque e a ausência de informação no ecrã resultam de um qualquer defeito no dispositivo ou de uma instalação incorrecta. Siga as instruções seguintes para resolver o problema.

1. Certifique-se de que todos os cabos de alimentação estão ligados incluindo os cabos do sistema e do monitor.
2. Verifique se o problema pode ter origem nos dispositivos de expansão.
    - Remova todas as placas e todos os dispositivos de expansão. Utilize apenas a Motherboard, o monitor, a placa VGA, os módulos de memória, a fonte de alimentação, o dissipador de calor e a ventoinha, o teclado e o rato para reiniciar o sistema.
    - Se este funcionar normalmente, é porque o problema é causado por um dos dispositivos de expansão. Reinstale um a um os dispositivos de expansão que removeu para conseguir detectar o que está defeituoso.
3. Verifique se o problema pode ter origem nos dispositivos básicos que compõem o sistema.
    - Se tiver dispositivos sobresselentes, pode substituir os mesmos à vez para tentar detectar o que está defeituoso seguindo a ordem seguinte “módulos de memória, CPU, Motherboard, unidade de disco rígido/óptica, teclado/rato.”

Quando encontrar o dispositivo defeituoso, contacte o vendedor para obter assistência.

3.2.3 Falha no acesso ao sistema operativo

1. Se o problema surgir após adicionar um elemento de hardware, remova o elemento de hardware que adicionou e reinicie o sistema. Se este funcionar normalmente sem o hardware, é porque este pode estar defeituoso ou pode ser incompatível com o sistema. Contacte o vendedor para obter assistência.
2. Se o problema surgir após instalar um software ou controlador, siga as instruções seguintes para resolver o problema.
    a. Aceda ao sistema operativo no modo de segurança e remova o software ou o controlador.
    b. Contacte a empresa responsável pelo sistema operativo para mais informações.
    c. Se não conseguir resolver o problema com as instruções acima, pode ter de formatar o disco rígido e reinstalar um novo sistema operativo.
3. Se o problema surgir após alterar as definições da BIOS, reinicie o sistema e aceda à BIOS para carregar as opções predefinidas. Consulte o guia do utilizador da Motherboard para mais informações.

4. Se o problema se dever a um vírus informático ou a ficheiros que estejam corrompidos, siga as instruções em baixo para resolver o problema.
    a. Aceda ao sistema operativo no modo de segurança e verifique se existem vírus utilizando uma aplicação antivírus.
    b. Contacte a empresa responsável pelo sistema operativo para mais informações.
    c. Se não conseguir resolver o problema com as instruções acima, pode ter de formatar o disco rígido e reinstalar um novo sistema operativo.

3.2.4 Perguntas frequentes

P1: A memória reportada durante a rotina POST é diferente da memória instalada.

R1: Esta diferença resulta da instalação de módulos de memória defeituosos ou de uma instalação incorrecta dos módulos DIMM. Certifique-se de que os módulos de memória DIMM estão em boas condições e instalados correctamente. Consulte o guia do utilizador da Motherboard para mais informações. Se instalar uma memória de 4.0 GB e o sistema reportar uma memória de 3.X GB, isto é normal.

P2. O sistema não detecta a unidade de disquetes mas o LED desta unidade está aceso.

R2: Os cabos da unidade de disquetes não estão devidamente ligados. A risca vermelha existente no cabo corresponde ao pino 1 e deve ficar alinhada com a marcação de pino 1 existente na unidade de disquetes.

P3: Falha no acesso ao sistema operativo após a detecção do disco flash USB ou de uma unidade de disco rígido externa.

R3: Quando o sistema detecta um disco flash USB ou a interface USB da unidade de disco rígido, pode alterar a prioridade do dispositivo de arranque. Remova os dispositivos USB e reinicie o sistema.

P4: Ao instalar o Windows XP, este não consegue detectar as unidades de disco rígido instaladas com o controlador RAID.

R4: O Windows XP não inclui o controlador RAID pelo que as unidades de disco rígido não são detectadas. Copie o controlador RAID para uma disquete e ao reiniciar o sistema com o disco do Windows XP prima <F6> para obter o controlador a partir da disquete. Consulte o guia do utilizador da Motherboard para mais informações.

Capítulo 4 : Cuidados a ter com o computador

4.1 Cuidados a ter com o PC

O seu computador pessoal é igual a qualquer outro aparelho que tenha em casa. Mantenha-o afastado de humidade, da exposição directa à luz solar e de quaisquer fontes de electricidade estática. Não deve mover o computador quando este estiver ligado para evitar danos no mesmo. A acumulação de pó no interior do computador pode afectar o funcionamento do disco e levar a problemas relacionados com o sobreaquecimento do sistema que, por sua vez, levam ao mau funcionamento do mesmo ou a danos ao nível dos componentes.

4.2 Sugestões básicas

1. Cubra o seu computador com uma capa contra o pó quando este não estiver a ser utilizado.
2. Ao utilizar o computador, não coloque nada sobre o monitor que possa bloquear os orifícios de ventilação. Um calor excessivo pode levar a um mau funcionamento do monitor.
3. Não coloque o computador próximo da parede e deixe algum espaço para permitir a dissipação do calor. Caso contrário, o sistema poderá falhar devido a um sobreaquecimento do mesmo.
4. Coloque o computador sobre uma superfície estável.
5. Mantenha o computador afastado de zonas com temperaturas extremas.
   A temperatura ideal é entre os 5 °C e 30 °C . Utilize um aparelho de ar condicionado ou uma ventoinha eléctrica para uma melhor dissipação do calor.
6. Organize os cabos de forma a permitir a livre circulação de ar.

4.3 Sugestões básicas para utilização

1. Ligue e desligue o computador regularmente. Se precisar de ter o computador ligado por um longo período de tempo, utilize um sistema/uma ventoinha para o CPU de melhor qualidade bem como uma fonte de alimentação de capacidade superior.
2. Um corte repentino no fornecimento de energia pode danificar a unidade de disco rígido. Quando o fornecimento de alimentação não é estável, recomendamos-lhe que adicione um UPS ao computador.
3. Mantenha os ficheiros de dados organizados, faça a verificação de vírus, actualize regularmente a base de dados de vírus e desfragmente o disco regularmente.
4. Limpe regularmente o pó ao seu computador. (Desligue todos os cabos de alimentação antes de limpar)

4.4 Sugestões

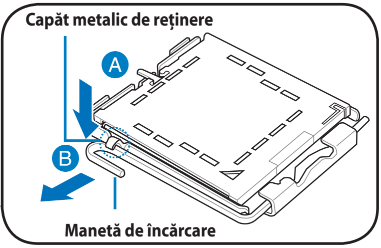
1. Se o seu computador não for utilizado por longos períodos de tempo, use produtos que absorvam a humidade do chassis para evitar quaisquer danos.
2. Nalgumas áreas quentes e húmidas, recomendamos-lhe que ligue o seu computador todas as semanas. Isto ajuda a evitar os danos provocados pela humidade.

Capitolul 1: Pornirea rapidă

1.1 Instalarea procesorului (CPU)

1.1.1 Soclul Intel® LGA775

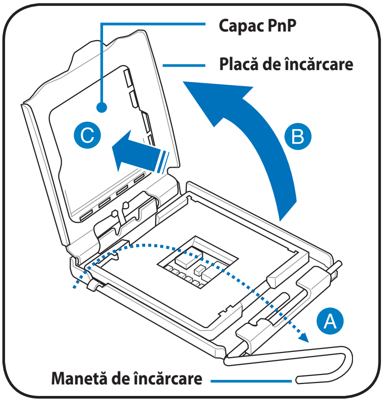
1. Localizaţi soclul pentru CPU pe placa de bază.
2. Apăsaţi maneta de încărcare cu degetul (A), apoi deplasaţi-l la stânga (B) până este eliberat de capătul metalic de reţinere.



Capăt metalic de reţinere
A
B
Manetă de încărcare

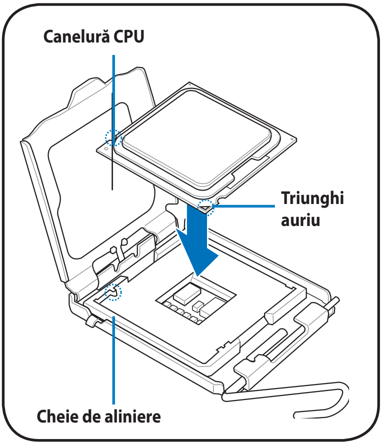
Pentru a nu deteriora pinii socket-ului nu îndepărtaţi capacul PnP decât dacă instalaţi un CPU.

3. Ridicaţi maneta de încărcare în direcţia săgeţii într-un unghi de 135º.
4. Ridicaţi placa de încărcare cu degetul mare şi degetul arătător într-un unghi de 100º(4A),apoi apăsaţi capacul PnP a ferestrei plăcuţei de memorie pentru a scoate (4B).



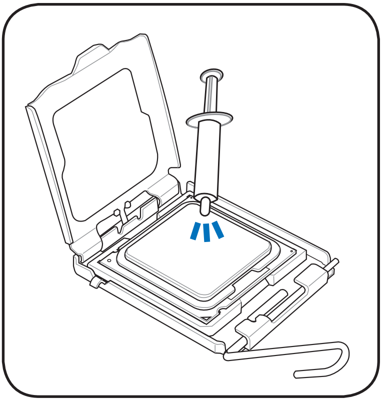
Capac PnP
Placă de încărcare
C
B
A
Manetă de încărcare

5. Poziționați CPU-ul peste socket, după asigurarea în prealabil că triunghiul auriu se află în -partea de stânga jos a socket-ului şi apoi fixați cheia de aliniere a acestuia în canelura CPU-ului.



CPu-ul se fixează corect într-o singură poziție. A NU SE FORȚA CPU-ul în socket pentru a preveni îndoirea conectorilor de pe socket şi deteriorarea CPU-ului!

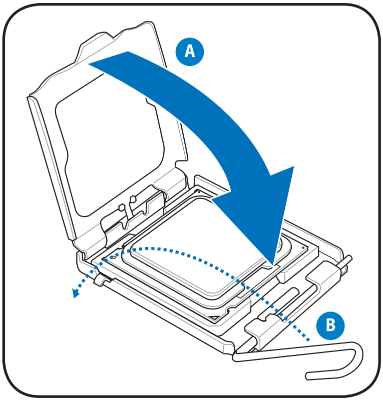
6. Aplicați material de contact termic pe suprafața expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subțire şi uniform.



Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteți acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălați-vă imediat şi consultați medicul.

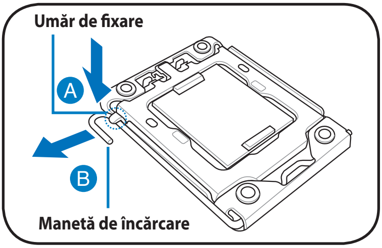
7. Închideţi placa de încărcare (A), apoi împingeţi maneta de încărcare (B) până se fixează în capătul mecanic de reţinere.



1.1.2 Soclu Intel® LGA1366

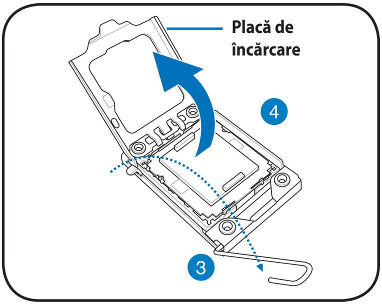
1. Localizaţi socket-ul de CPU pe placa de bază.

2. Apăsaţi maneta de încărcare cu degetul (A), apoi deplasaţi-l la stânga (B) până este eliberat de capătul metalic de reţinere.

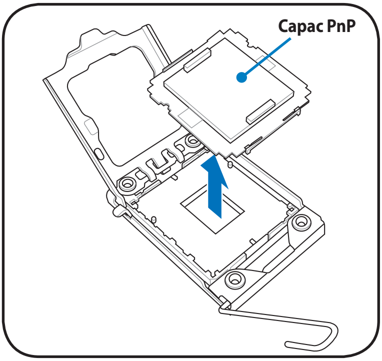

Umăr de fixare
A
B
Manetă de încărcare

Pentru a nu deteriora pinii socket-ului nu îndepărtaţi capacul PnP decât dacă instalaţi un CPU.

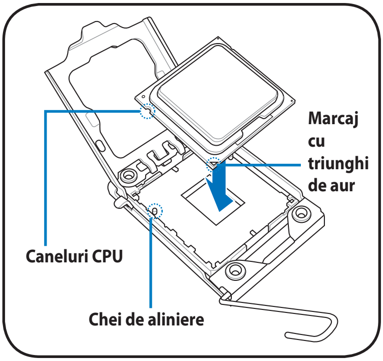
3. Ridicaţi maneta de încărcare în direcţia săgeţii într-un unghi de 135º.
4. Ridicaţi placa de încărcare cu degetul mare şi degetul arătător într-un unghi de 100º.


Placă de încărcare
4
3

5. Îndepărtaţi capacul PnP de pe socket-ul CPU.

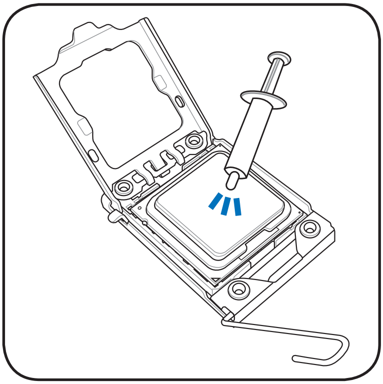


6. Poziţionaţi CPU-ul peste socket, după asigurarea în prealabil că triunghiul auriu se află în -partea de stânga jos a socket-ului şi apoi fixaţi cheia de aliniere a acestuia în canelura CPU-ului.



CPu-ul se fixează corect într-o singură poziție. A NU SE FORȚA CPU-ul în socket pentru a preveni îndoirea conectorilor de pe socket şi deteriorarea CPU-ului!

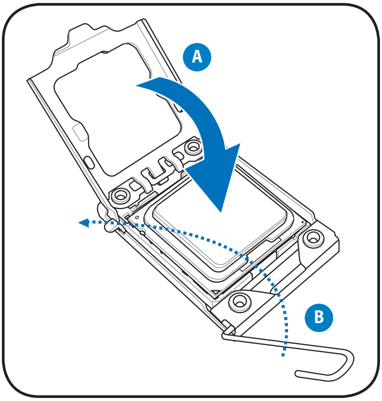
7. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteți acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

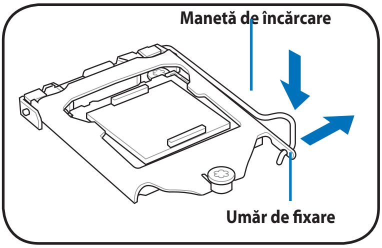
8. Închideți placa de încărcare (A), apoi împingeți maneta de încărcare (B) până se fixează în capătul mecanic de reținere.



1.1.3 Soclu Intel® LGA1156

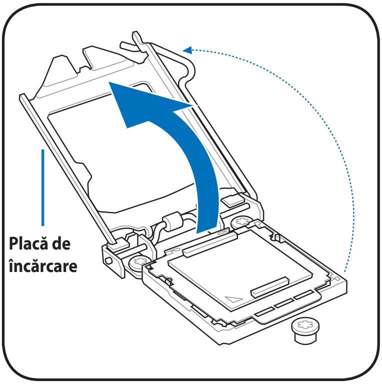
LGA1155 CPU este incompatibil cu soclul LGA1156. NU instalați un LGA1155 CPU pe un soclu LGA1156.

1. Localizați soclul CPU pe placa de bază.
2. Apăsați pe maneta de încărcare cu degetul mare (A) şi apoi deplasați-o spre dreapta (B) până când se eliberează din umărul de fixare.

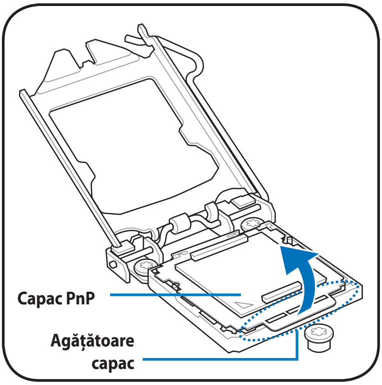

Manetă de încărcare
Umăr de fixare

Pentru a împiedica deteriorarea pinilor soclului, nu îndepărtați capacul PnP până când nu instalați un CPU.

3. Ridicați maneta de încărcare în direcția săgeții până când placa de încărcare s-a ridicat complet.

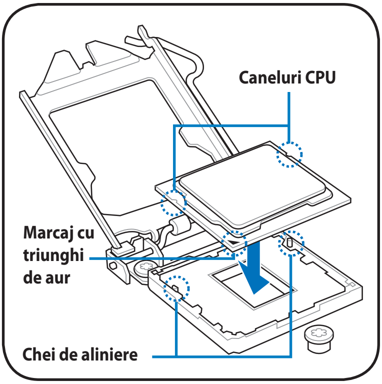

Placă de
încărcare

4. Scoateți capacul PnP de pe soclul CPU prin ridicarea doar a agățătorii.

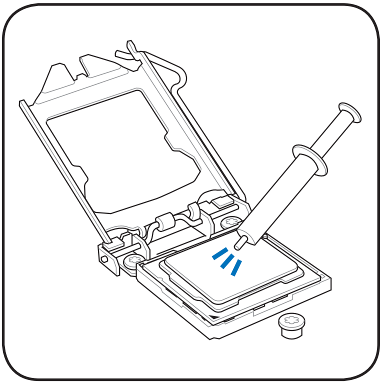

Capac PnP
Agățătoare
capac

5. Poziţionaţi modulul CPU deasupra soclului, asigurându-vă că triunghiul de aur -se află în colţul din stânga al soclului, şi apoi potriviţi cheile de aliniere a soclului în canelurile modulului CPU.

Modulul CPU se potriveşte într-o singură orientare, cea corectă. NU forţaţi pătrunderea modulului CPU în soclu pentru a împiedica îndoirea conectorilor de pe soclu şi deteriorarea modulului CPU!



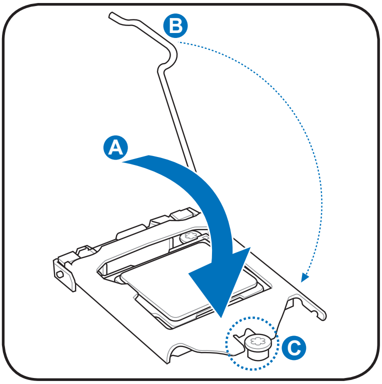
6. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



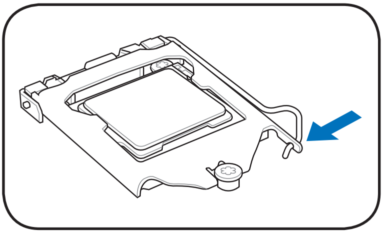
Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

7. Închideţi placa de încărcare (A) şi apoi apăsaţi în jos pe maneta de încărcare (B) asigurându-vă că marginea frontală a plăcii de încărcare glisează sub zăvorul de fixare (C).



8. Introduceţi maneta de încărcare sub umărul de fixare.

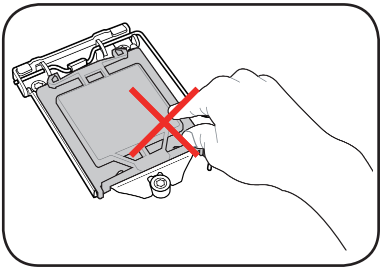


1.1.4 Soclu Intel® LGA1155 (Capac PnP de pe placa de încãrcat)

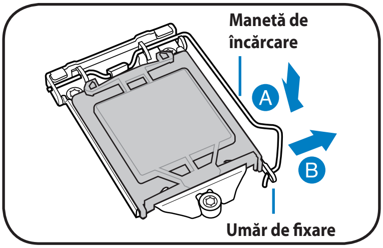
LGA1156 CPU este incompatibil cu soclul LGA1155. NU instalaţi un LGA1156 CPU pe un soclu LGA1155.

1. Localizaţi soclul CPU pe placa de bază.

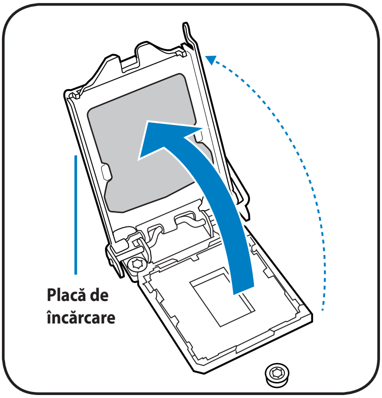
2. Asigurati-vã cã nu îndepãrtati capacul PnP de pe soclul CPU înainte de a instala CPU.



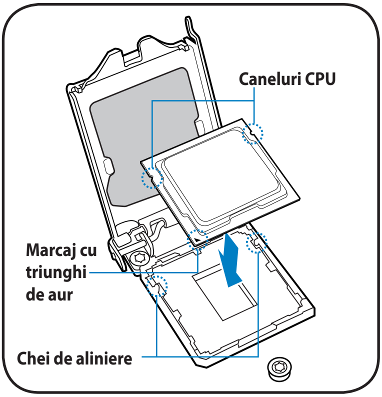
3. Apăsaţi pe maneta de încărcare cu degetul mare (A) şi apoi deplasaţi-o spre dreapta (B) până când se eliberează din umărul de fixare.



4. Ridicaţi maneta de încărcare în direcţia săgeţii până când placa de încărcare s-a ridicat complet.

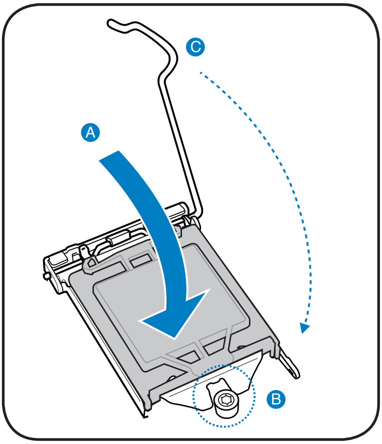


5. Poziţionaţi modulul CPU deasupra soclului, asigurându-vă că triunghiul de aur -se află în colţul din stânga al soclului, şi apoi potriviţi cheile de aliniere a soclului în canelurile modulului CPU.

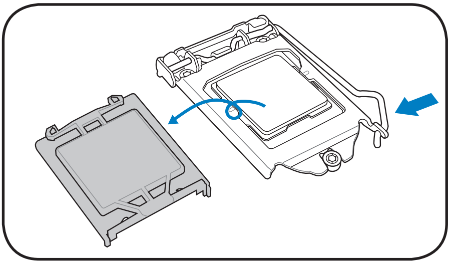


Modulul CPU se potriveşte într-o singură orientare, cea corectă. NU forţaţi pătrunderea modulului CPU în soclu pentru a împiedica îndoirea conectorilor de pe soclu şi deteriorarea modulului CPU!

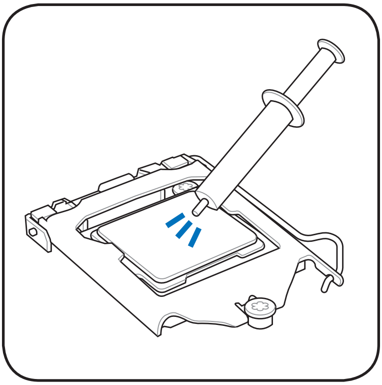
6. Închideti capacul de încãrcat (A), asigurându-vã cã marginea din fatã a plãcii de încãrcat culiseazã sub blocajul de retentie (B). Apoi împingeti în jos mânerul de încãrcat (C).



7. Introduceti mânerul de încărcat sub tabulatorul de retentie pentur a îndepărta capacul PnP de pe soclul CPU.



8. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



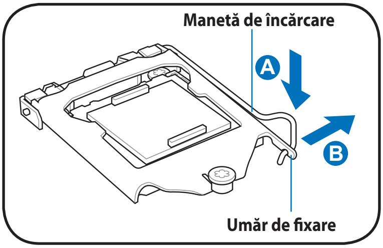
Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

1.1.5 Soclu Intel® LGA1155(Capacul PnP sub placa de încărcat)

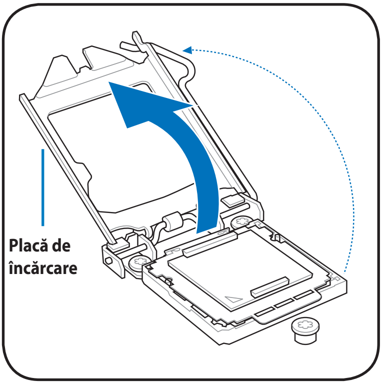
LGA1156 CPU este incompatibil cu soclul LGA1155. NU instalaţi un LGA1156 CPU pe un soclu LGA1155.

1. Localizaţi soclul CPU pe placa de bază.
2. Apăsaţi pe maneta de încărcare cu degetul mare (A) şi apoi deplasaţi-o spre dreapta (B) până când se eliberează din umărul de fixare.

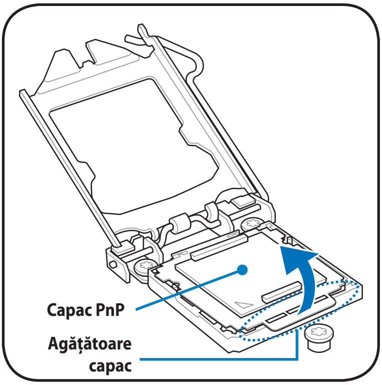

Manetă de încărcare
A
B
Umăr de fixare

Pentru a împiedica deteriorarea pinilor soclului, nu îndepărtaţi capacul PnP până când nu instalaţi un CPU.

3. Ridicaţi maneta de încărcare în direcţia săgeţii până când placa de încărcare s-a ridicat complet.

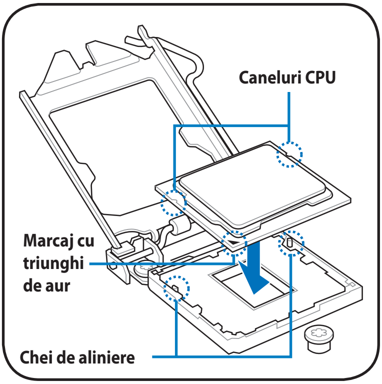

Placă de încărcare

4. Scoateţi capacul PnP de pe soclul CPU prin ridicarea doar a agăţătorii.


Capac PnP
Agăţătoare capac

5. Poziţionaţi modulul CPU deasupra soclului, asigurându-vă că triunghiul de aur -se aflǎ în colţul din stânga al soclului, şi apoi potriviţi cheile de aliniere a soclului în canelurile modulului CPU.

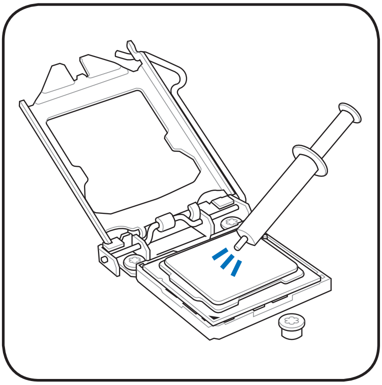
Modulul CPU se potriveşte într-o singură orientare, cea corectă. NU forţaţi pătrunderea modulului CPU în soclu pentru a împiedica îndoirea conectorilor de pe soclu şi deteriorarea modulului CPU!



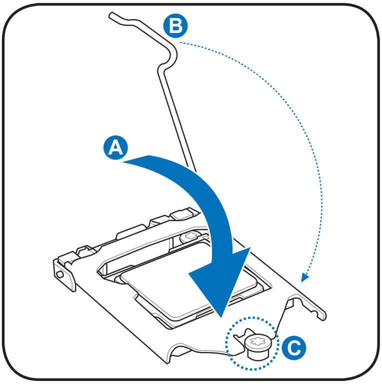
6. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.

Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

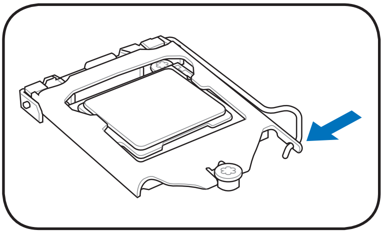
Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.



7. Închideţi placa de încărcare (A) şi apoi apăsaţi în jos pe maneta de încărcare (B) asigurându-vă că marginea frontală a plăcii de încărcare glisează sub zăvorul de fixare (C).

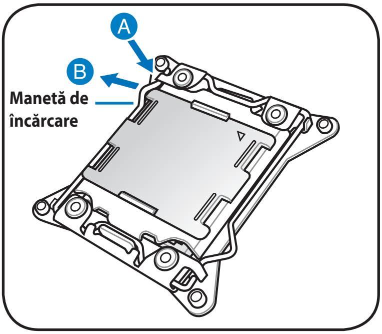


8. Introduceţi maneta de încărcare sub umărul de fixare.



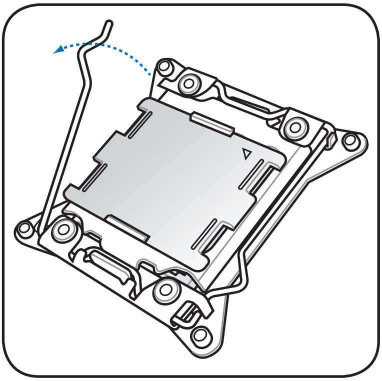
1.1.6 Soclu Intel® LGA2011

1. Localizaţi socket-ul de CPU pe placa de bază.
2. Apăsaţi maneta de încărcare cu degetul (A), apoi deplasaţi-l la stânga (B) până este eliberat de capătul metalic de reţinere.

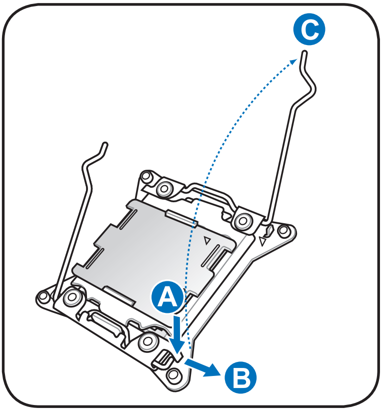


Pentru a nu deteriora pinii socket-ului nu îndepărtaţi capacul PnP decât dacă instalaţi un CPU.

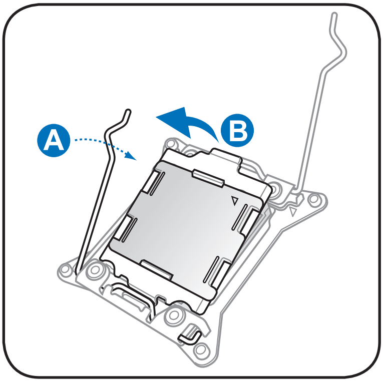
3. Ridicaţi uşor pârghia de încărcare în direcţia săgeţii.



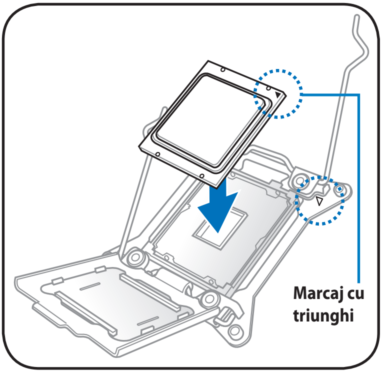
4. Închideţi placa de încărcare (A) şi apoi apăsaţi în jos pe maneta de încărcare (B) asigurându-vă că marginea frontală a plăcii de încărcare glisează sub zăvorul de fixare (C). Ridicaţi uşor pârghia de încărcare în direcţia săgeţii (C).



5. Împingeţi pârghia de încărcare stânga (A) pentru a ridica plăcuţa de încărcare (B).

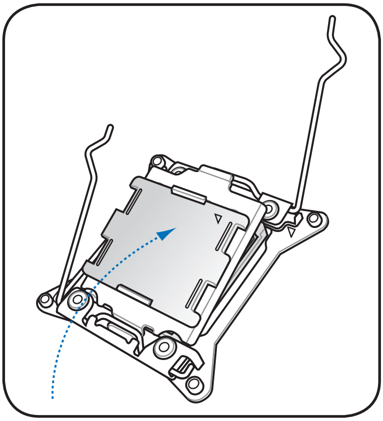


6. Aşezaţi procesorul peste soclu, asigurându-vă că marcajul triunghiular se găseşte în colţul din dreapta sus al soclului.

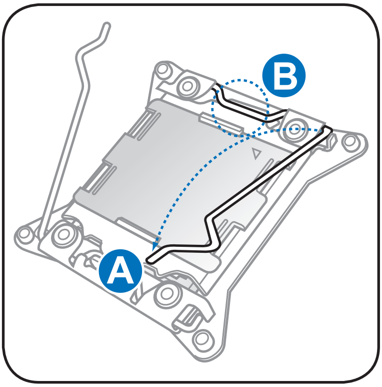


CPu-ul se fixează corect într-o singură poziţie. A NU SE FORŢA CPU-ul în socket pentru a preveni îndoirea conectorilor de pe socket şi deteriorarea CPU-ului!

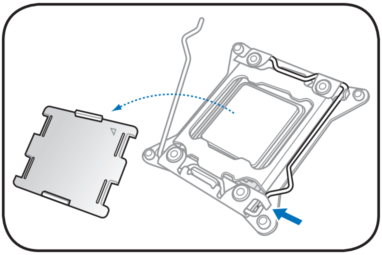
7. Închideţi placa de sarcină.



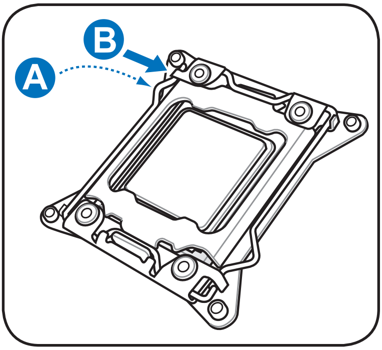
8. Împingeți în jos maneta de încărcare din dreapta (A), asigurându-vă că marginea plăcii de încărcare este fixată de manetă (B).



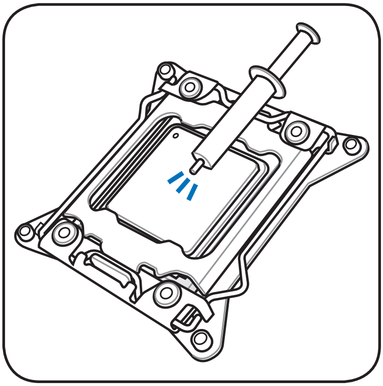
9. Introduceți maneta de încărcare din dreapta sub umărul de fixare. Îndepărtați capacul PnP de pe soclul procesorului.



10. Împingeți în jos maneta de încărcare din stânga (A) şi apoi introduceți maneta sub umărul de fixare (B).



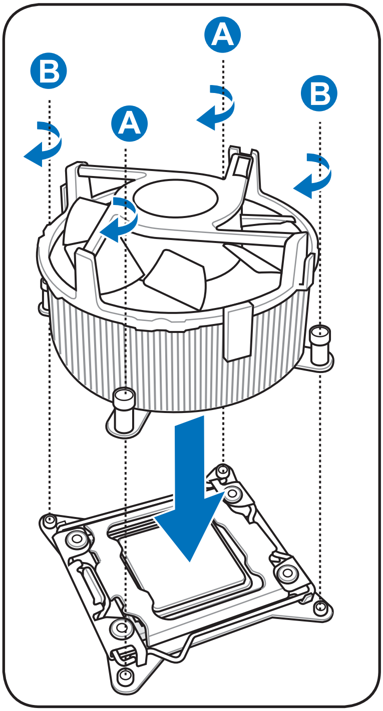
11. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



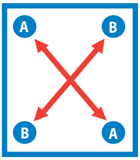
Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

12. Amplasaţi radiatorul deasupra procesorului instalat, asigurându-vă că cele patru cleme se fixează în orificiile soclului procesorului.
13. Răsuciţi fiecare dintre cele patru şuruburi cu o şurubelniţă Philips (în cruce) suficient pentru a ataşa radiatorul de soclul procesorului. Când cele patru şuruburi sunt fixate, strângeţi-le unul câte unul pentru a fixa complet radiatorul.



Strângeţi cele patru şuruburi ale radiatorului în diagonală.

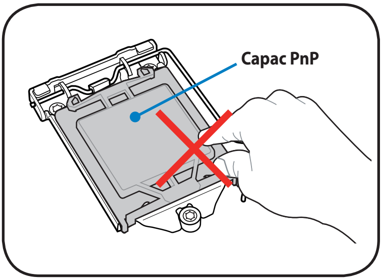


1.1.7 Soclu Intel® LGA1150 (Capac PnP de pe placa de încãrcat)

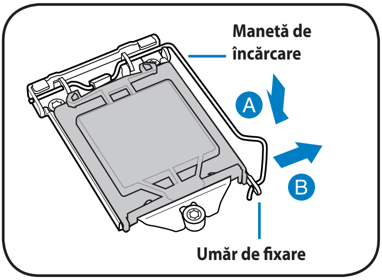
Asiguraţi-vă că instalaţi o unitate CPU corectă, compatibilă cu conexiunea LGA1150. NU instalaţi o unitate CPU destinată conexiunilor LGA1155 sau LGA1156 în conexiunea LGA1150.

1. Localizaţi soclul CPU pe placa de bază.

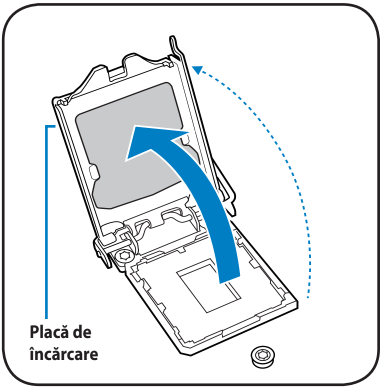
NU îndepărtaţi capacul PnP de pe conexiunea CPU. În caz contrar, pinii conexiunii se pot îndoi. Consultaţi ilustraţia de mai jos pentru a vedea unde se află capacul PnP.



2. Apăsaţi pe maneta de încărcare cu degetul mare (A) şi apoi deplasaţi-o spre dreapta (B) până când se eliberează din umărul de fixare.

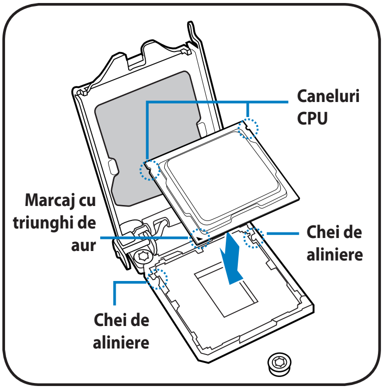


3. Ridicaţi maneta de încărcare în direcţia săgeţii până când placa de încărcare s-a ridicat complet.

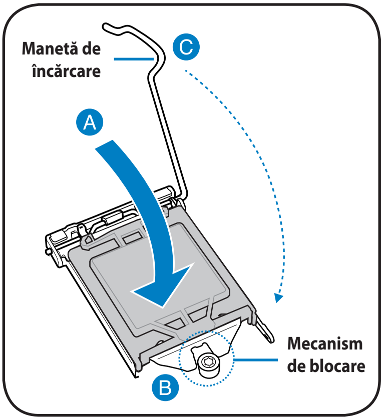


4. Poziționați modulul CPU deasupra soclului, asigurându-vă că triunghiul de aur -se află în colțul din stânga al soclului, apoi potriviți picioruşele unității CPU cu orificiile de aliniere ale conexiunii.

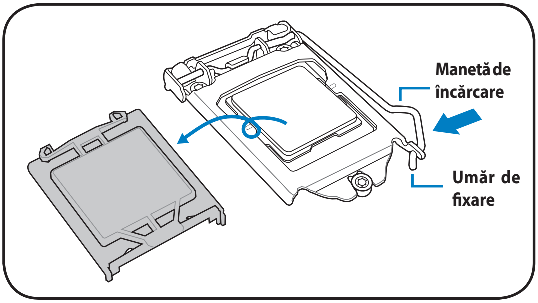
Modulul CPU se potriveşte într-o singură orientare, cea corectă. NU forțați pătrunderea modulului CPU în soclu pentru a împiedica îndoirea conectorilor de pe soclu şi deteriorarea modulului CPU!


Caneluri CPU
Marcaj cu triunghi de aur
Chei de aliniere
Chei de aliniere

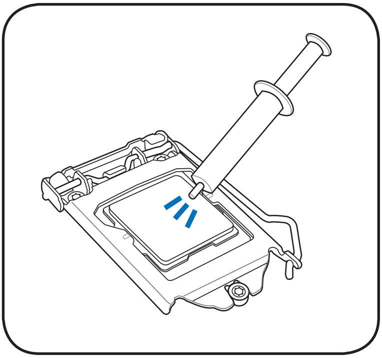
5. Închideti capacul de încărcat (A), asigurându-vă că marginea din fată a plăcii de încărcat culisează sub blocajul de retentie (B). Apoi împingeti în jos mânerul de încărcat (C).


Manetă de încărcare
C
A
Mecanism de blocare
B

6. Introduceti mânerul de încărcat sub tabulatorul de retentie pentur a îndepărta capacul PnP de pe soclul CPU.


Manetă de încărcare
Umăr de fixare

7. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



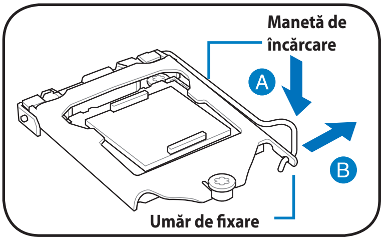
Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

1.1.8 Soclu Intel® LGA1150 (Capacul PnP sub placa de încãrcat)

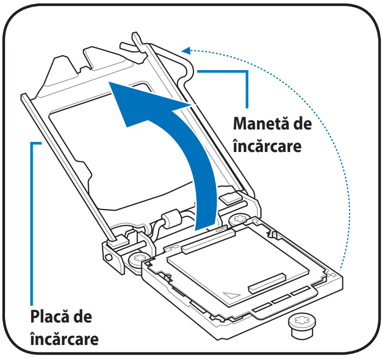
Asiguraţi-vă că instalaţi o unitate CPU corectă, compatibilă cu conexiunea LGA1150. NU instalaţi o unitate CPU destinată conexiunilor LGA1155 sau LGA1156 în conexiunea LGA1150.

1. Localizaţi soclul CPU pe placa de bază.
2. Apăsaţi pe maneta de încărcare cu degetul mare (A) şi apoi deplasaţi-o spre dreapta (B) până când se eliberează din umărul de fixare.

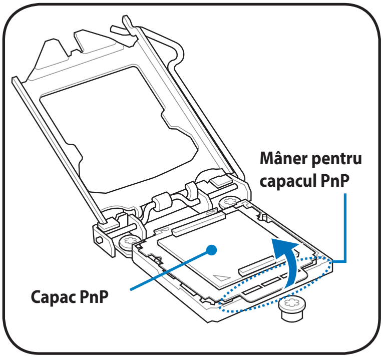

Manetă de încărcare
A
B
Umăr de fixare

NU îndepărtaţi capacul PnP de pe conexiunea CPU. În caz contrar, pinii conexiunii se pot îndoi.

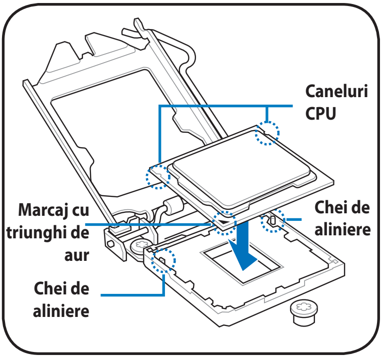
3. Ridicaţi maneta de încărcare în direcţia săgeţii până când placa de încărcare s-a ridicat complet.


Manetă de încărcare
Placă de încărcare

4. Scoateţi capacul PnP de pe soclul CPU prin ridicarea doar a agăţătorii.

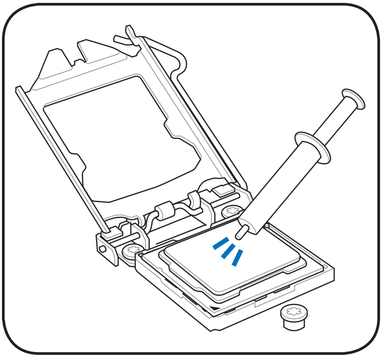

Mâner pentru capacul PnP
Capac PnP

5. Poziționați modulul CPU deasupra soclului, asigurându-vă că triunghiul de aur -se află în colțul din stânga al soclului, şi apoi potriviți cheile de aliniere a soclului în canelurile modulului CPU.


Caneluri CPU
Marcaj cu triunghi de aur
Chei de aliniere
Chei de aliniere

> Modulul CPU se potriveşte într-o singură orientare, cea corectă. NU forțați pătrunderea modulului CPU în soclu pentru a împiedica îndoirea conectorilor de pe soclu şi deteriorarea modulului CPU!

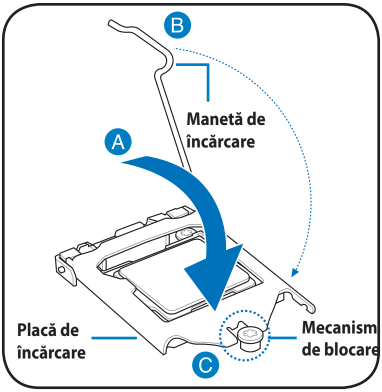
6. Aplicați material de contact termic pe suprafața expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subțire şi uniform.



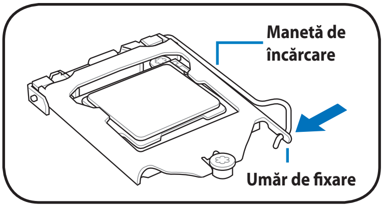
> Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteți acest pas.

> Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălați-vă imediat şi consultați medicul.

7. Închideți placa de încărcare (A) şi apoi apăsați în jos pe maneta de încărcare (B) asigurându-vă că marginea frontală a plăcii de încărcare glisează sub zăvorul de fixare (C).


B
Manetă de încărcare
A
Placă de încărcare
Mecanism de blocare
C

8. Introduceți maneta de încărcare sub umărul de fixare.

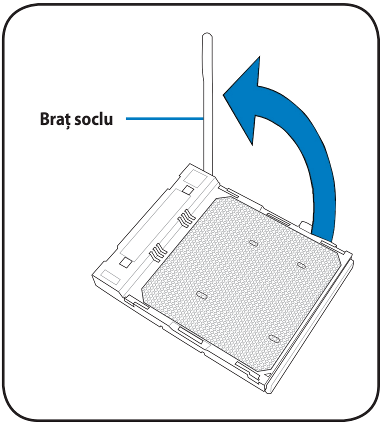

Manetă de încărcare
Umăr de fixare

1.1.9 Soclu AMD AM2 / AM2+ / AM3

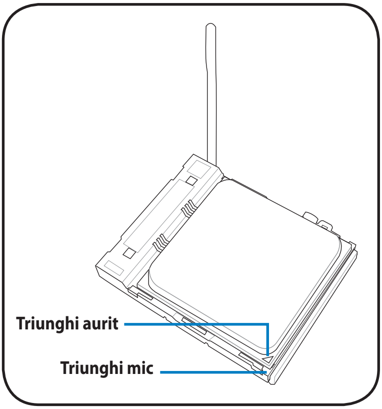
- Soclurile AMD AM2 şi AM2+ sunt compatibile cu procesoarele AMD AM2, Am2+ şi AM3.
- Mufa AMD AM3 este compatibilă cu procesoarele AMD AM3. NU instalaţi un procesor AMD AM2+ / AM2 pe o mufă AM3. Doar anumite modele de placă de bază AM3 suportă procesoarele AM3+ prin upgradarea BIOS-lui. Referiţi-vă la pagina de ajutor ASUS pentru detalii.

1. Localizaţi socket-ul de CPU pe placa de bază.
2. Apăsaţi maneta în lateral pentru a debloca socket-ul, apoi ridicaţi-l într-un unghi de 90º.

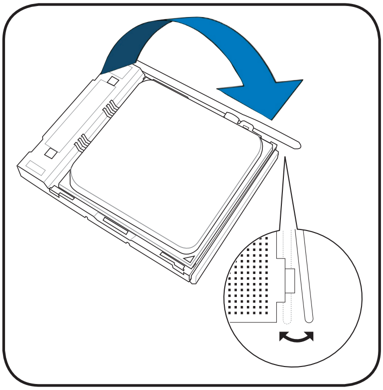
Asiguraţi-vă că maneta socket-ului este ridicată întrun unghi de 90º. În caz contrar, CPU-ul nu se va îmbina perfect.



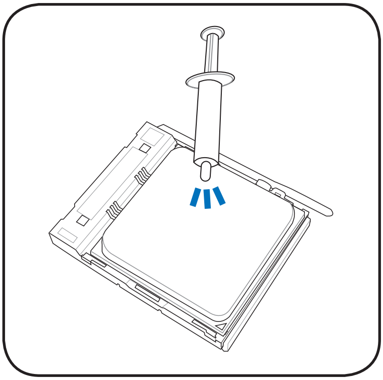
3. Poziţionaţi CPU-ul deasupra socket-ului astfel încât colţul CPU-ului cu triunghiul auriu să se potrivească cu triunghiul mic de pe colţul socket-ului.
4. Inseraţi cu grijă CPU-ul în socket până se fixează.



5. Când CPU-ul este îmbinat, împingeţi maneta socket-ului pentru a fixa CPU-ul. Maneta se îmbină zgomotos cu capătul metalic de reţinere pentru a indica că este fixat.



6. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

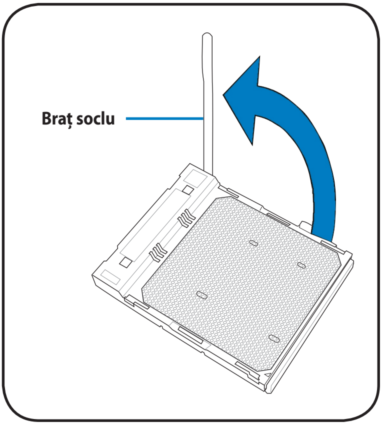
Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

1.1.10 Soclu AMD AM3+

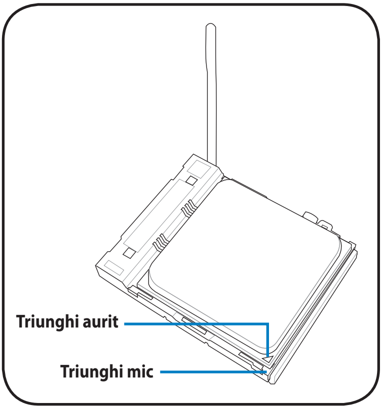
Mufa AMD AM3+ este compatibilă cu procesoarele AMD AM3+ şi AM3. Doar numite modele de placă de bază AM3 suportă procesoarele AM3+ prin upgradarea BIOS-lui. Referiți-vă la pagina de ajutor ASUS pentru detalii.

1. Localizaţi socket-ul de CPU pe placa de bază.
2. Apăsaţi maneta în lateral pentru a debloca socket-ul, apoi ridicaţi-l într-un unghi de 90º.

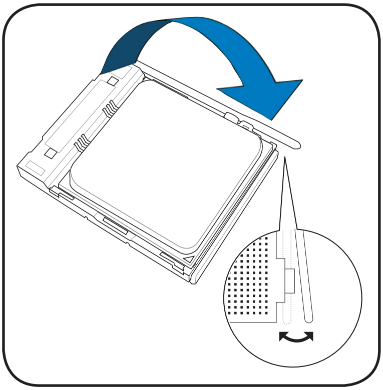
Asiguraţi-vă că maneta socket-ului este ridicată întrun unghi de 90º. În caz contrar, CPU-ul nu se va îmbina perfect.



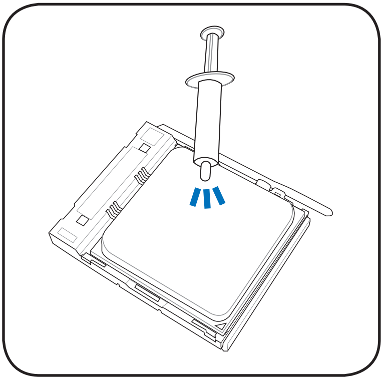
3. Poziţionaţi CPU-ul deasupra socket-ului astfel încât colţul CPU-ului cu triunghiul auriu să se potrivească cu triunghiul mic de pe colţul socket-ului.
4. Inseraţi cu grijă CPU-ul în socket până se fixează.



5. Când CPU-ul este îmbinat, împingeţi maneta socket-ului pentru a fixa CPU-ul. Maneta se îmbină zgomotos cu capătul metalic de reţinere pentru a indica că este fixat.



6. Aplicaţi material de contact termic pe suprafaţa expusă de pe CPU cu care va intra în contact radiatorul, asigurându-vă că este întins într-un strat subţire şi uniform.



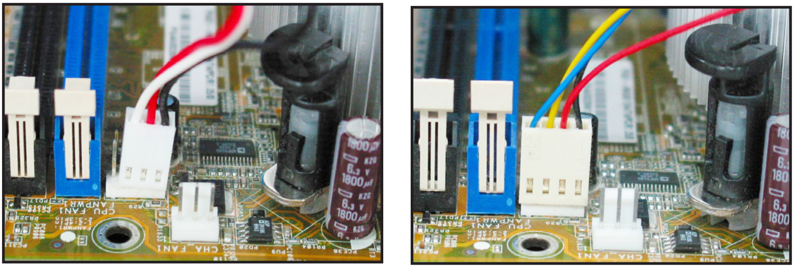
Unele radiatoare se livrează cu o pastă termică aplicată din fabrică. În acest caz, omiteţi acest pas.

Materialul de contact termic este toxic şi necomestibil. A NU se ingera. Dacă intră în contact cu ochii sau cu pielea, spălaţi-vă imediat şi consultaţi medicul.

1.2 Instalarea radiatorului şi a ventilatorului

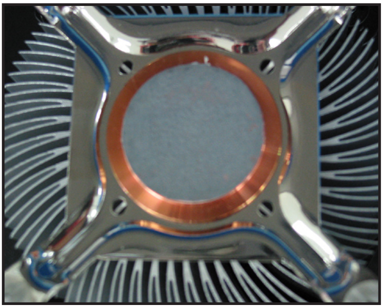
Pentru instalarea radiatorului şi a ventilatorului pentru CPU:

1. Selectaţi un ansamblu de radiator şi ventilator certificat de Intel sau de AMD, în funcţie de placa dvs. de bază Există conectori de ventilator cu 3 portizolatori (stânga) şi cu 4 portizolatori (dreapta). Doar ventilatoarele cu conectori cu 4 portizolatori suportă tehnologia ASUS Q-Fan.



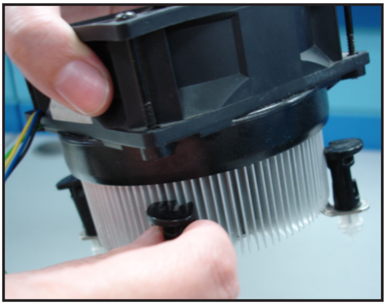
Pentru radiatorul certificat de Intel:

2. Unele radiatoare sunt livrate cu pastă termică pre-aplicată. În acest caz, nu o răzuiţi şi îndepărtaţi pelicula protectoare doar înainte de instalare. În caz contrar, aplicaţi câteva picături de pastă termică pe zona expusă a CPU-ului cu care va fi în contact radiatorul. Asiguraţi-vă că aceasta se răspândeşte într-un strat subţire şi uniform.

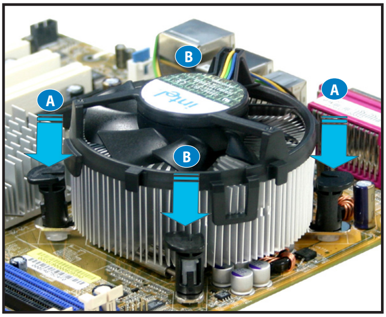


Pentru prevenirea contaminării cu pastă, NU răspândiţi pasta direct cu degetul.

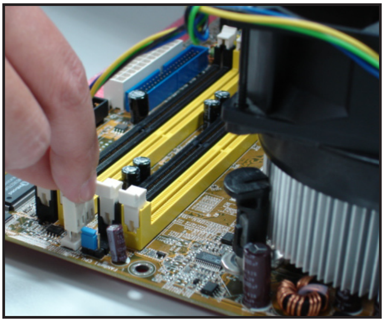
3. Orientaţi fiecare dispozitiv de fixare cu partea îngustă a canalului înspre în afară.



4. Împingeţi în jos câte două dispozitive de fixare odată, în secvenţă diagonală, pentru asigurarea ansamblului de radiator şi ventilator în poziţie.



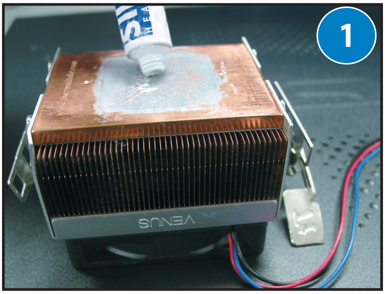
5. Conectaţi cablul ventilatorului pentru CPU la conectorul corespunzător de pe placa de bază.

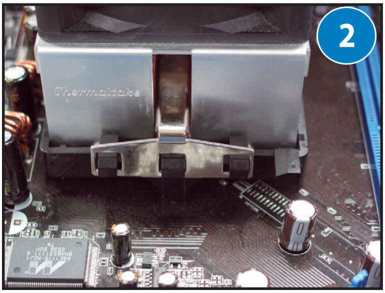


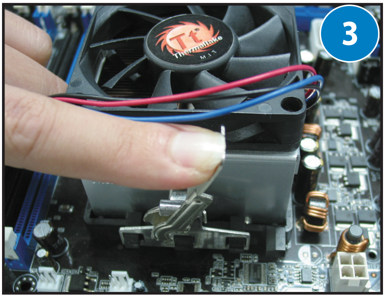
NU uitaţi să conectaţi conectorul ventilatorului! Se pot produce erori de monitorizare a hardware-ului în cazul în care omiteţi să conectaţi acest conector; vă sugerăm să folosiţi un radiator omnidirecţional, pentru a beneficia de o suprafaţă maximă de disipare a căldurii.

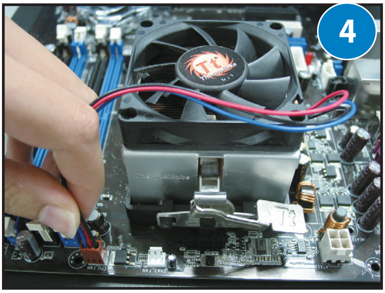
Pentru radiatorul certificat de AMD:

Urmaţi instrucţiunile de mai jos pentru instalarea unui radiator certificat de AMD.







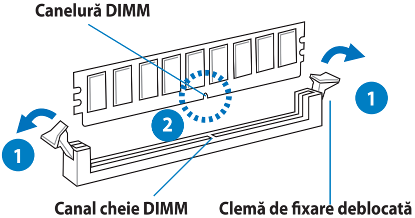


1.3 Instalarea unui modul DIMM

Asiguraţi-vă că aţi deconectat alimentarea înainte de a adăuga sau îndepărta module DIMM sau alte componente de sistem. Nerespectarea acestei condiţii poate provoca deteriorarea gravă a plăcii de bază şi a componentelor.

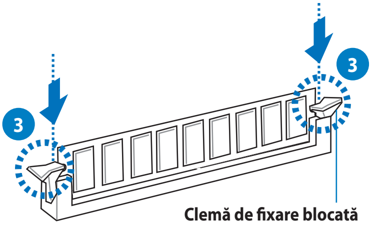
Instalarea unui modul DIMM pe un soclu DIMM cu două cleme

1. Deblocaţi un soclu DIMM prin apăsarea spre exterior pe clemele de fixare.
2. Aliniaţi un DIMM pe soclu în aşa fel încât şanţul de pe DIMM să se potrivească cu canalul cheii DIMM de pe soclu.



Un modul DIMM are ca cheie o canelură care se potriveşte într-o singură direcţie. NU forţaţi un DIMM în soclu în direcţia greşită pentru a evita deteriorarea DIMM-lui.

3. Ţineţi DIMM-ul de ambele sale capete, apoi introduceţi vertical DIMM-ul în soclu. Aplicaţi presiune simultan la ambele capete ale DIMM-lui până când clamele de prindere se fixează la locul lor, iar DIMM-ul nu mai poate fi apăsat mai departe, pentru a asigura o aşezare corectă a DIMM-lui.

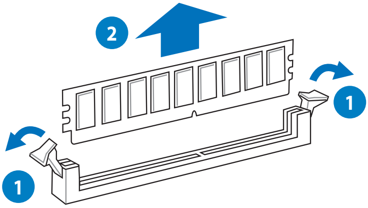


Introduceţi întotdeauna VERTICAL în soclu DIMM-ul pentru a preveni deteriorarea şanţului DIMM-lui.

- Pentru a instala două sau mai multe module DIMM, consultaţi ghidul de utilizare livrat în pachetul plăcii de bază.
- Consultaţi ghidul de utilizare pentru a afla lista vânzătorilor certificaţi de module de memorie.

Scoaterea unui DIMM dintr-un soclu DIMM cu clame duble

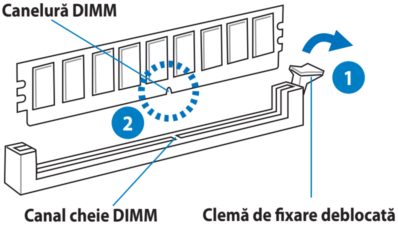
1. Apăsaţi simultan în faţă clemele de prindere pentru a debloca DIMM-ul.
2. Scoateţi DIMM-ul din soclu.



Sprijiniţi uşor cu degetele DIMM-ul când apăsaţi clemele de prindere. DIMM-ul ar putea fi deteriorat daca se scoate brusc cu forţă suplimentară.

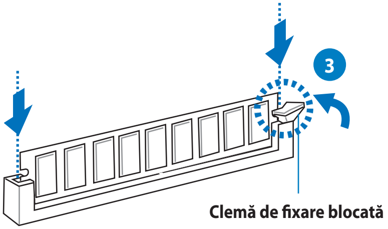
Instalarea unui modul DIMM pe un soclu DIMM cu o clemă

1. Deblocați un soclu DIMM prin apăsarea spre exterior pe clemele de fixare.
2. Aliniați un DIMM pe soclu în așa fel încât șanțul de pe DIMM să se potrivească cu canalul cheii DIMM de pe soclu.



Un modul DIMM are ca cheie o canelură care se potrivește într-o singură direcție. NU forțați un DIMM în soclu în direcția greșită pentru a evita deteriorarea DIMM-lui.

3. Țineți DIMM-ul de ambele sale capete, apoi introduceți vertical DIMM-ul în soclu. Aplicați presiune simultan la ambele capete ale DIMM-lui până când clamele de prindere se fixează la locul lor, iar DIMM-ul nu mai poate fi apăsat mai departe, pentru a asigura o așezare corectă a DIMM-lui.

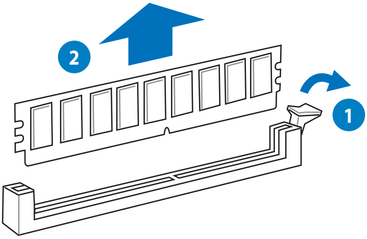


Introduceți întotdeauna VERTICAL în soclu DIMM-ul pentru a preveni deteriorarea șanțului DIMM-lui.

- Pentru a instala două sau mai multe module DIMM, consultați ghidul de utilizare livrat în pachetul plăcii de bază.
- Consultați ghidul de utilizare pentru a afla lista vânzătorilor certificați de module de memorie.

Scoaterea unui DIMM dintr-un soclu DIMM cu o singură clamă

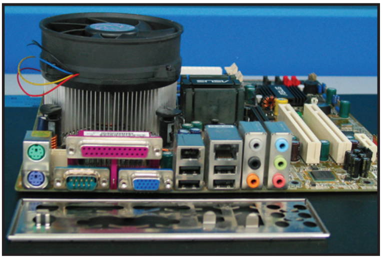
1. Apăsați în față clema de prindere pentru a debloca DIMM-ul.
2. Scoateți DIMM-ul din soclu.



Sprijiniți ușor cu degetele DIMM-ul când apăsați clemele de prindere. DIMM-ul ar putea fi deteriorat daca se scoate brusc cu forță suplimentară.

1.4 Instalarea plăcii de bază

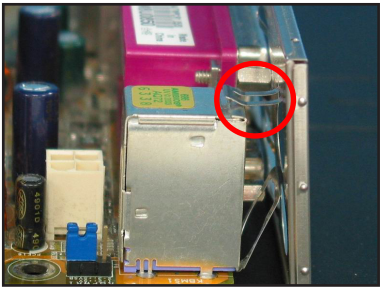
1. Porturile I/O diferă la plăcile de bază. Folosiţi şi instalaţi doar scutul I/O din spate livrat în pachetul plăcii de bază.



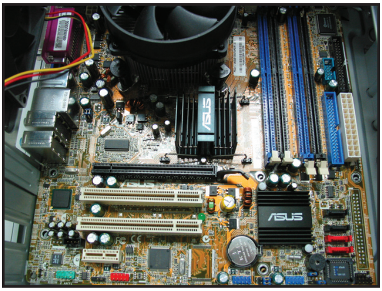
Unele margini şi puncte ascuţite pot cauza accidentări fizice. Se recomandă purtarea de mănuşi rezistente la tăiere la instalarea plăcii de bază şi a scutului I/O.

2. Instalaţi distanţierele în găurile pentru şurub ajustate pe placa metalică.

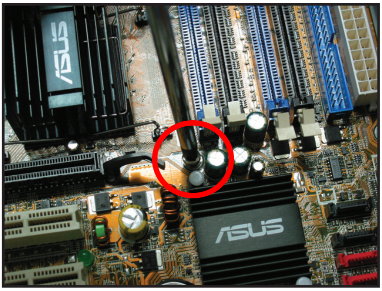
3. Arcurile de pe marginile scutului I/O pot deteriora porturile I/O. Procedaţi cu grijă când instalaţi scutul I/O.



4. Poziţionaţi partea I/O a plăcii de bază către partea din spate a şasiului şi aşezaţi placa de bază în şasiu.



5. Introduceţi şi strângeţi puţin fiecare şurub în secvenţă diagonală. După introducerea tuturor şuruburilor, strângeţi şuruburile până la capăt.



- Puteţi înlătura capacele metalice ale sloturilor de cartele de extensie din spatele şasiului înainte de instalarea plăcii de bază. La unele modele de şasiuri, capacul slotului de extensie poate fi dificil de înlăturat după instalare.
- NU strângeţi şuruburile în exces. Acest lucru poate deteriora placa de bază.

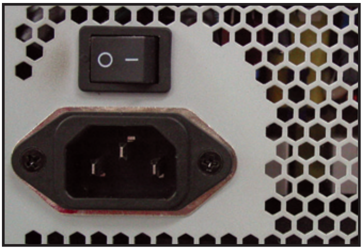
1.5 Instalarea unităţii de alimentare cu curent

Există două tipuri de unităţi de alimentare cu curent folosite în mod obişnuit. Un tip are Corecţia Factorului de Alimentare (CFA) activă, celălalt o are pasivă.

1. Selectaţi o unitate de alimentare cu curent.

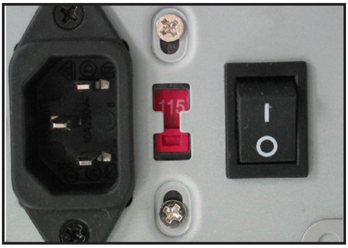
Alimentarea cu CFA pasivă:

CFA pasivă necesită ca utilizatorul să regleze manual tensiunea de intrare c.a.

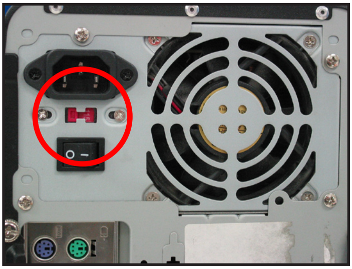


Alimentarea cu CFA activă:

CFA activă corectează automat tensiunea de intrare c.a.



2. Dacă folosiţi o alimentare cu CFA pasivă, reglaţi la tensiunea de intrare c.a. corectă în zona dvs.



Omisiunea de a regla alimentarea la tensiunea de intrare c.a. corectă va deteriora grav sistemul.

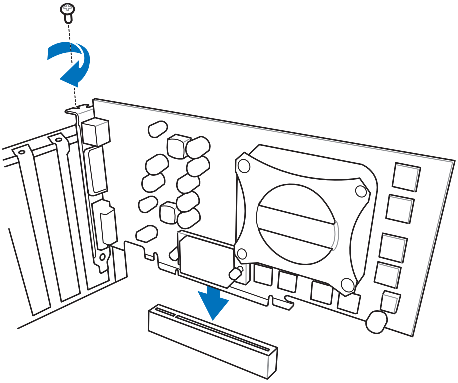
Folosiţi doar unităţi de alimentare cu certificat de siguranţă. Folosirea unităţilor de alimentare instabile poate deteriora placa dvs. de bază şi alte componente. Consultaţi ghidul utilizatorului pentru unităţile de alimentare care respectă cerinţele plăcii de bază.

1.6 Instalarea cardului de extensie

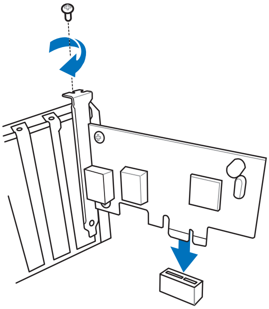
Pentru instalarea cardului de extensie:

1. Îndepărtaţi capacul metalic al slotului din partea opusă slotului cardului de extensie unde vreţi să îl instalaţi.
2. Instalaţi cardul de extensie şi asiguraţi-vă că este aşezat corect în slot.
3. Înşurubaţi pentru asigurarea cardului în slot.
4. Repetaţi paşii anteriori pentru instalarea unui alt card de extensie.

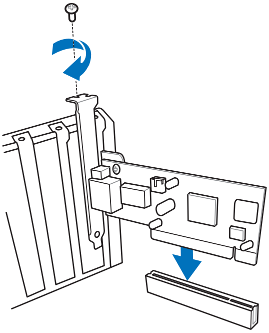
Cardul PCIE x16



Cardul PCIE x1



Cardul PCI

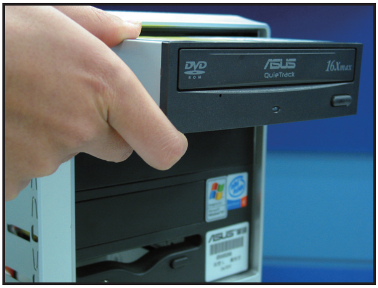


- Consultaţi documentaţia cardurilor pentru detaliile de configurare şi ghidul utilizatorului plăcii de bază în cazul în care trebuie să configuraţi elemente de legătură după instalarea cardului de extensie.
- Consultaţi ghidul utilizatorului plăcii de bază pentru instrucţiunile de conectare a cablului de semnal al cardului de extensie.

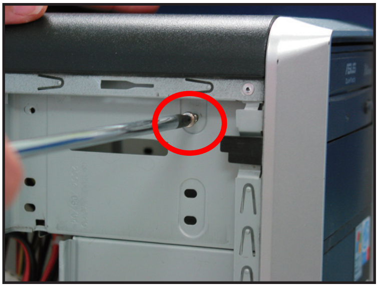
1.7 Instalarea unităţilor de disc

1.7.1 Unitatea de disc optic PATA

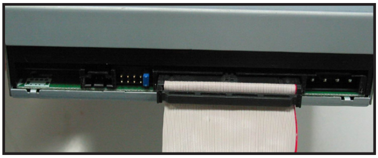
1. Înlăturaţi capacul provizoriu şi culisaţi unitatea de disc optic în bay.



2. Aliniaţi găurile pentru şurub şi asiguraţi unitatea de disc cu şuruburi.

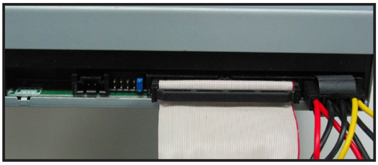


3. Orientaţi şi conectaţi cablul IDE în unitatea optică. Banda roşie de pe cablul IDE este capătul portizolatorului 1 şi trebuie să se potrivească cu marcajul ondulat Portizolator 1 de pe unitatea optică.

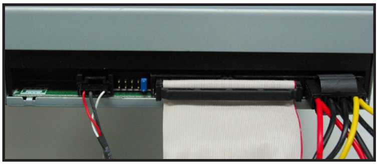


Cablurile IDE sunt protejate provizoriu. Nu forţaţi niciodată cablul IDE în conector.

4. Conectaţi cablul de alimentare cu 4 portizolatori la unitatea optică.



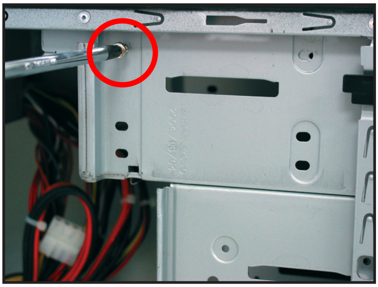
5. Ataşaţi cablul audio la conectorul de pe unitatea optică.



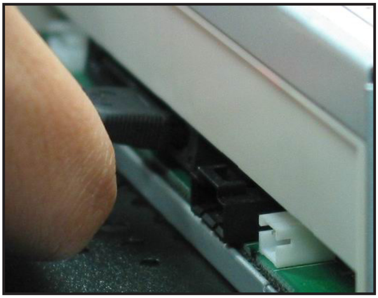
1.7.2 Unitatea de disc optic SATA

1. Înlăturaţi capacul provizoriu şi culisaţi unitatea de disc optic în bay.

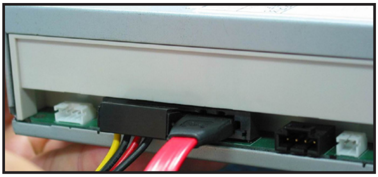
2. Aliniaţi găurile pentru şurub şi asiguraţi unitatea de disc cu şuruburi.



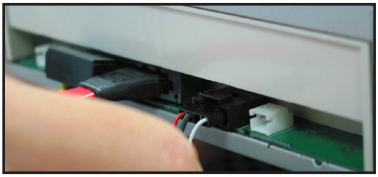
3. Orientaţi şi conectaţi cablul SATA în unitatea optică. Cablurile SATA sunt protejate provizoriu. Nu forţaţi niciodată un cablu SATA în conector.



4. Conectaţi cablul de alimentare SATA la unitatea optică.

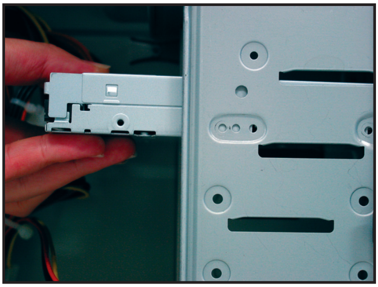


5. Ataşaţi cablul audio la conectorul de pe unitatea optică.

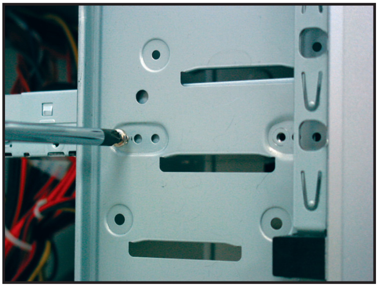


1.7.3 Unitatea de dischetă

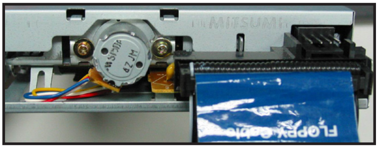
1. Înlăturaţi capacul provizoriu şi introduceţi unitatea de dischetă în bay.



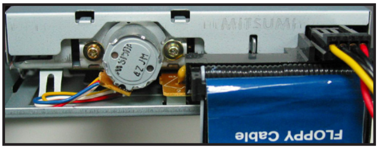
2. Aliniaţi găurile pentru şurub şi asiguraţi unitatea de disc cu şuruburi.



3. Orientaţi şi conectaţi cablul de interfaţă pentru dischetă în unitatea de dischetă. Banda roşie de pe cablu este capătul portizolatorului 1 şi trebuie să se potrivească cu Portizolator 1 de pe unitatea de dischetă.

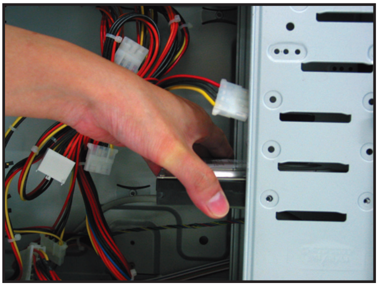


4. Conectaţi cablul de alimentare dischetă la conectorul din spatele unităţii de dischetă.



1.7.4 Unitatea de hard disk PATA

1. Introduceţi unitatea de hard disk PATA în bay.

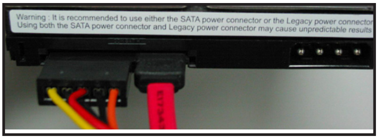


2. Aliniaţi găurile pentru şurub şi asiguraţi unitatea de disc cu şuruburi.

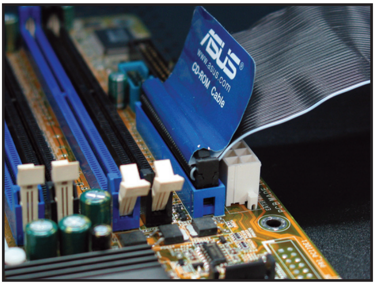
3. Orientaţi şi conectaţi cablul de semnal la unitatea de hard disk. Banda roşie de pe cablu este capătul portizolatorului 1. Potriviţi ancoşa provizorie şi nu forţaţi cablul în conector.

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Conectaţi cablul de alimentare cu 4 portizolatori la conectorul din spatele unităţii de hard disk.

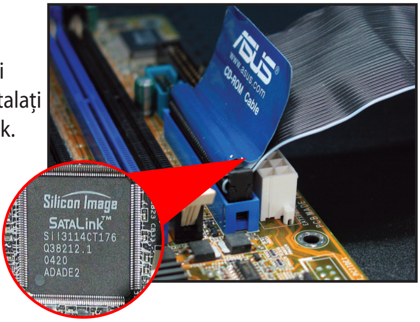

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

5. Ataşaţi celălalt capăt al cablului de semnal la slotul corespunzător de pe placa de bază.

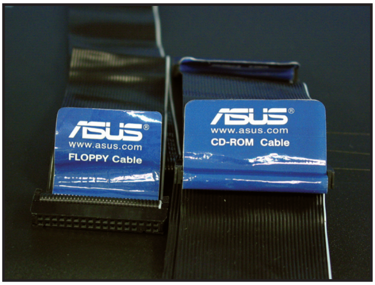

ASUS
www.asus.com
CD-ROM Cable

Note pentru instalarea unităţii de hard disk PATA

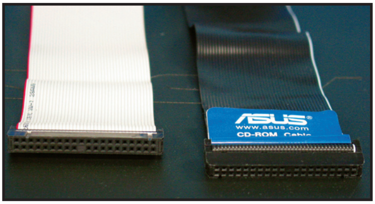
- Dacă sistemul dvs. de operare este instalat pe unitatea de hard disk controlată de RAID sau de alţi controleri, trebuie mai întâi să instalaţi driver-ul controlerului pe hard disk.


ASUS
www.asus.com
CD-ROM Cable
Silicon Image
SATALink™
Sil3114CT176
Q38212.1
0420
ADADE2

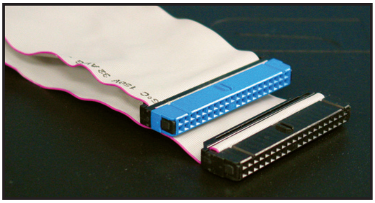
- Conectorul de cablu este codat pe culoare. Cel albastru este pentru conectorul gazdă, iar cel negru/gri este pentru unitatea de disc primară/secundară.


ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

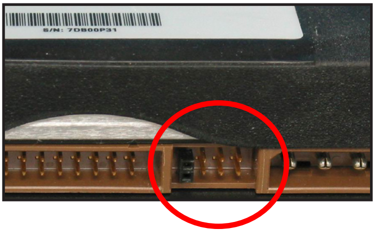
- Sunt două cabluri pentru unităţile de disc ATA IDE, cablul mai nou cu 80 de fire (dreapta) şi cel mai vechi cu 40 de fire (stânga). Pentru unităţile de disc ATA66/100/133, doar cablul de 80 de fire poate oferi o performanţă mai bună. Cablurile de 40 de fire sunt folosite de obicei pentru unităţile optice.


ASUS
www.asus.com
CD-ROM Cable

- Cablurile sunt concepute cu agăţătoare. Instalaţi uşor unităţile de disc pe baza etichetelor cablului. Pentru prevenirea deteriorării portizolatorilor, deconectaţi cablul trăgând de agăţători.

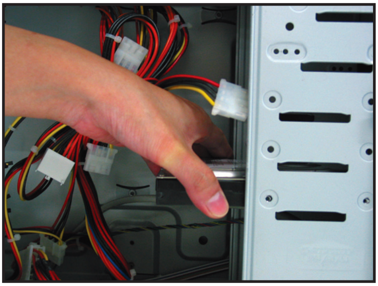


- Când conectaţi două dispozitive IDE, trebuie să setaţi elementele de legătură la poziţii diferite, unul în unitatea principală şi unul în cea secundară. Dacă folosiţi un cablu cu 80 de fire, puteţi folosi modul de selectare a cablului.

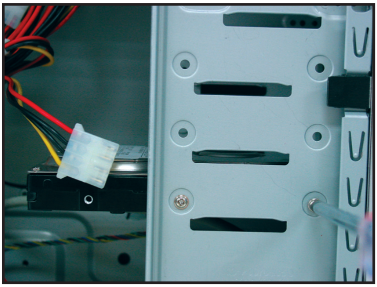

S/N: 7DB00P31

1.7.5 Unitatea de hard disk SATA

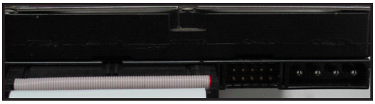
1. Introduceți unitatea de hard disk SATA în bay.



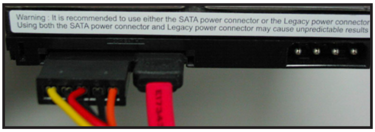
2. Aliniați găurile pentru şurub şi asigurați unitatea de disc cu şuruburi.



3. Orientați şi conectați cablul SATA la unitatea de hard disk. Cablul se potriveşte într-o singură direcție.



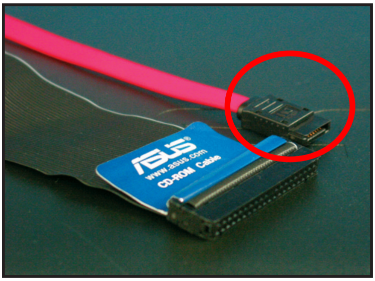
4. Conectați cablul de alimentare SATA la conectorul din spatele unității de hard disk.



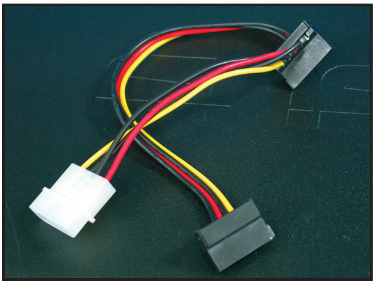
Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Note pentru instalarea unității de hard disk SATA

- Interfața Serial ATA (SATA) furnizează o viteză de transmisie a datelor mai mare şi o toleranță de tensiune mai bună. Designul îngust al cablului SATA rezolvă de asemenea probleme de cablaj şi permite o circulație mai bună a aerului în şasiu.
- Conectorul cablului de alimentare SATA este diferit de conectorul de alimentare tradițional cu 4 portizolatori. Placa de bază ASUS se livrează cu cabluri pentru adaptorul de alimentare, în cazul în care unitatea dvs. de alimentare cu curent nu include acest tip de conector nou.

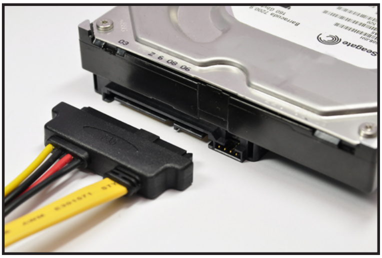


ASUS
www.asus.com
CD-ROM Cable

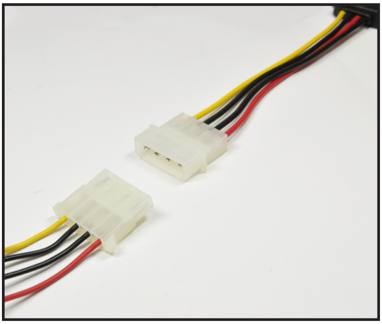


1.7.6 Unitatea de hard disk SAS

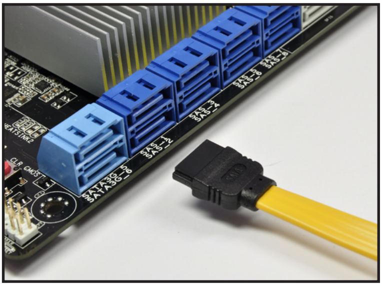
1. Orientaţi şi conectaţi cablul combo de alimentare/semnal SAS la unitatea de hard disk. Cablul se potriveşte într-o singură direcţie.



2. Conectaţi cablul de alimentare SAS la conectorul electric de pe unitatea de alimentare.



3. Conectaţi cablul de semnal SAS la conectorul SAS de pe placa de bază.

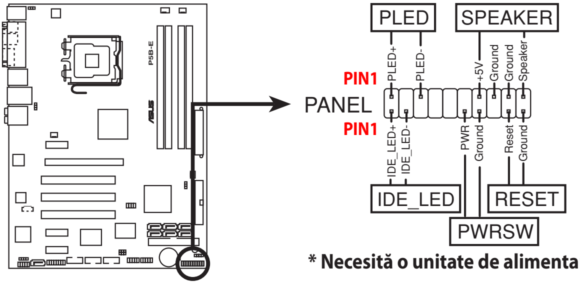


1.8 Cablurile panoului frontal

Pentru conectarea cablurilor panoului frontal:

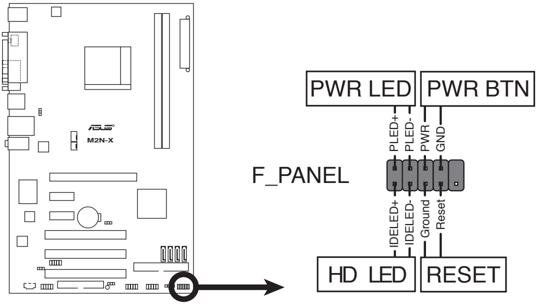
- RESET (Comutatorul de reiniţializare)
- PLED (LED-ul de alimentare)
- PWRSW (Comutatorul de alimentare)
- IDE_LED (LED-ul activ hard disk IDE)
- SPEAKER (Conectorul difuzorului)

Conectorul panoului frontal cu 20-8 portizolatori


P5B-E
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

*** Necesită o unitate de alimentare ATX**

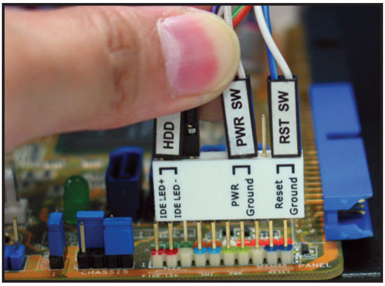
Conectorul panoului frontal cu 10-1 portizolatori


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Cablurile panoului frontal ale şasiului dvs. pot să difere în funcţie de model sau design. Conectaţi aceşti conectori la placa de bază în conformitate cu eticheta.
- Dacă LED-urile nu se iluminează, iar locaţia portizolatorilor este corectă, se poate să fi aşezat greşit portizolatorii legării la pământ cu cei de semnal. De obicei, firul alb desemnează portizolatorii legării la pământ, iar firul colorat pe cei de semnal.
- Cablurile panoului frontal pentru Difuzor, Comutatorul de reiniţializare şi Comutatorul de alimentare nu au o orientare specifică, în timp ce cablurile pentru LED-ul de hard disk IDE şi LED-ul de alimentare au o orientare specifică. Conectaţi cablul Portizolator1 la conectorul Portizolator1 de pe placa de bază.
- Conectorul panoului frontal variază în funcţie de modelul plăcii de bază, consultaţi ghidul utilizatorului pentru mai multe informaţii.

Conectorul ASUS Q

Instalarea într-un singur pas a conectorului ASUS Q vă economiseşte timpul de efortul de a vă lupta cu cablurile în dezordine ale panoului frontal. Consultaţi ghidul utilizatorului pentru detalii.

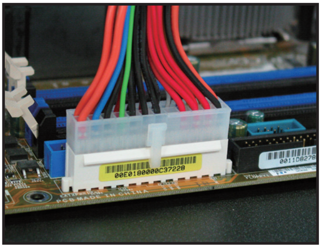


Conectorul Q este disponibil la modele selectate. Consultaţi ghidul utilizatorului pentru detalii.

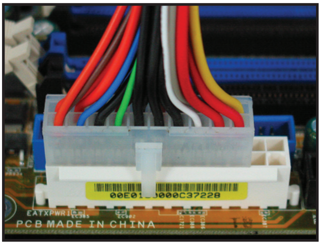
1.9 Conectarea unităţii de alimentare ATX

Conectorii unităţii de alimentare ATX se potrivesc doar într-o singură orientare. Folosiţi clama laterală pentru fixarea conectorilor la placa de bază. NU forţaţi conectorii de alimentare tată în conectorii mamă de pe placa de bază. De obicei, sunt doi conectori pe placa de bază, cu 24 de portizolatori şi cu 4 portizolatori. Unele unităţi de alimentare mai vechi pot avea doar conectorul de alimentare cu 20 de portizolatori, care se potriveşte şi la cel cu 24 de portizolatori de pe placa de bază.

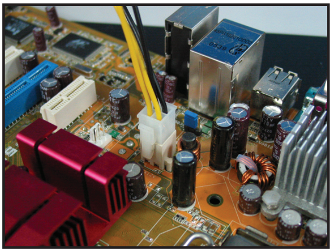
conectorul de alimentare cu 24 de portizolatori



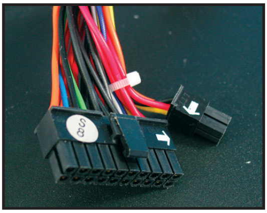
conectorul de alimentare cu 20 de portizolatori (pe conectorul mamă cu 24 de portizolatori)

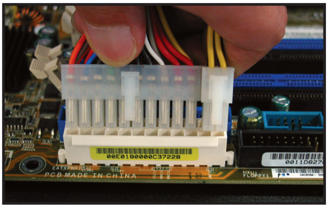


conectorul de alimentare cu 4 portizolatori



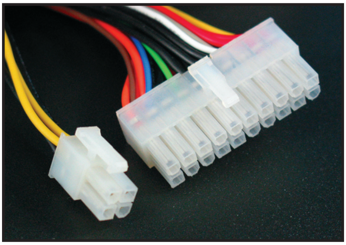
- NU ataşaţi alimentarea c.a. externă când conectaţi conectorii de alimentare la placa de bază.
- Asiguraţi-vă de fixarea fermă a conectorilor de alimentare pe placa de bază.
- Dacă unitatea dvs. de alimentare suportă 20 de portizolatori + 4 portizolatori, puteţi să combinaţi aceşti doi conectori şi să-i instalaţi la conectorii cu 24 de portizolatori de pe placa de bază.



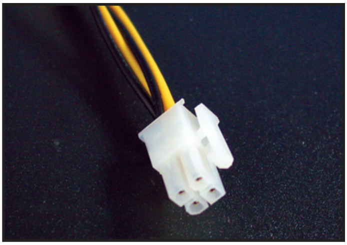


Conectorii de alimentare

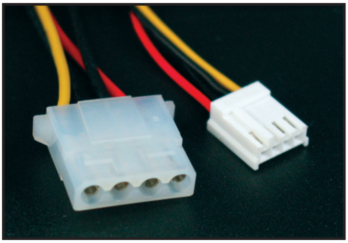
conectorul ATX cu 20+4 (24) de portizolatori



conectorul ATX cu 4 portizolatori

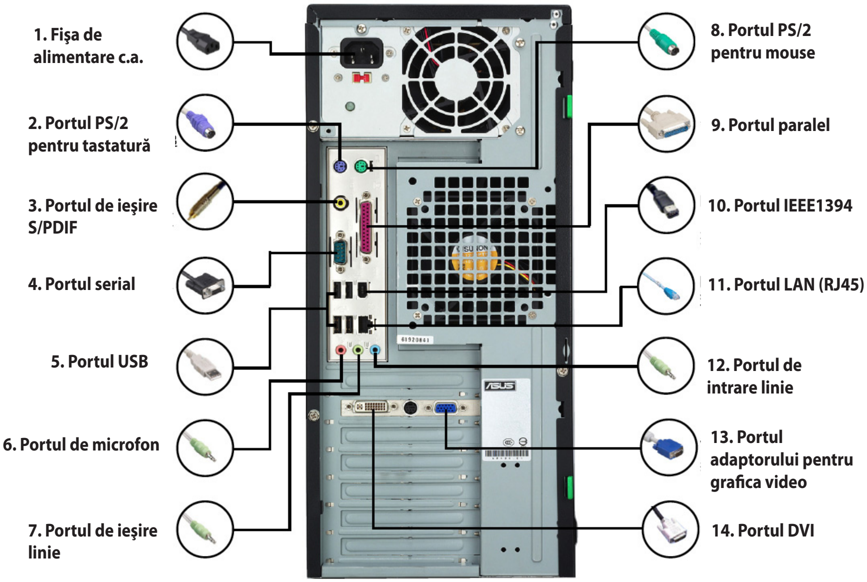


conectorul de alimentare pentru periferice (stânga)
conectorul de alimentare pentru dischetă (dreapta)



1.10 Dispozitivele şi accesoriile periferice

Consultaţi diagrama de mai jos pentru conectarea dispozitivelor şi accesoriilor periferice


1. Fişa de alimentare c.a.
2. Portul PS/2 pentru tastatură
3. Portul de ieşire S/PDIF
4. Portul serial
5. Portul USB
6. Portul de microfon
7. Portul de ieşire linie
8. Portul PS/2 pentru mouse
9. Portul paralel
10. Portul IEEE1394
11. Portul LAN (RJ45)
12. Portul de intrare linie
13. Portul adaptorului pentru grafica video
14. Portul DVI

1. Fişa de alimentare c.a. şi cablul prelungitor

2. Portul PS/2 pentru tastatură şi tastatura

3. Portul de ieşire S/PDIF şi sistemul digital de difuzor 5.1

4. Portul serial şi docul PDA

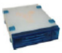
5. Portul USB şi dispozitivele USB

6. Portul de microfon şi microfonul

7. Portul de ieşire linie şi difuzorul

8. Portul PS/2 pentru mouse şi mouse-ul

9. Portul paralel şi imprimanta

10. Portul IEEE1394 şi unitatea de hard disk extern


11. Portul LAN (RJ45) şi modem-ul

12. Portul de intrare linie şi înregistratorul

13. Portul VGA şi monitorul CRT

14. Portul DVI şi monitorul LCD

Conectorii panoului din spate variază în funcţie de model. Consultaţi ghidul utilizatorului pentru detalii.

1.11 Pornirea pentru prima dată

Sistemul execută apoi testarea automată la punerea sub tensiune (POST). În timp ce sunt executate testele, BIOS-ul emite un bip (consultaţi tabelul cu codurile de bip pentru BIOS de mai jos)

Bip BIOS	Descriere
Un bip continuu urmat de trei bip-uri scurte	VGA nedetectat
Un bip continuu urmat de două bip-uri scurte, apoi o pauză (repetat)	Memorie nedetectată
Un bip continuu urmat de patru bip-uri scurte	Defectare componentă hardware (AMI BIOS)
Patru bip-uri scurte	Defectare componentă hardware (AWARD BIOS)

Depanarea

Problemă	Acţiune
• Calculatorul nu porneşte • LED-ul de alimentare nu este iluminat • Ventilatorul de alimentare nu funcţionează	Asiguraţi-vă de conectarea corectă a cablului de alimentare.
Calculatorul este pornit, dar monitorul este negru	• Asiguraţi-vă că monitorul este pornit şi cablul VGA este conectat corect. • Reglaţi strălucirea şi contrastul monitorului. • Opriţi calculatorul şi înlăturaţi cablul de alimentare. Verificaţi dacă este instalată strâns cartela VGA.
Memorie nedetectată	• Asiguraţi-vă că modulul de memorie este corect. • Asiguraţi-vă că DIMM-urile sunt aşezate strâns în soclul DIMM. • Asiguraţi-vă că modulul de memorie este din lista vânzătorilor autorizaţi. Consultaţi ghidul utilizatorului pentru lista vânzătorilor autorizaţi.
Eroare dischetă (indicatorul este iluminat în permanenţă sau un mesaj de avertizare apare pe ecran.)	• Verificaţi configuraţia BIOS despre unitatea de dischetă. • Asiguraţi-vă de corectitudinea conectării cablurilor unităţii de dischetă.
Eroare unitate de hard disk sau optică (nerecunoscută sau nedetectată)	• Asiguraţi-vă că setarea elementului de legătură este corectă. (Unitate principală/secundară) • Verificaţi configuraţia BIOS despre unitatea de hard disk sau cea optică. • Asiguraţi-vă de ataşarea strânsă a cablurilor dispozitivului. • Asiguraţi-vă că driver-ele dispozitivului sunt instalate.

Capitolul 2: Gestionarea/actualizarea BIOS-ului

2.1 Utilitarul AFUDOS

Utilitarul AFUDOS vă permite actualizarea fişierului BIOS în mediul DOS, folosind o dischetă de pornire cu fişierul BIOS actualizat. Acest utilitar vă permite să copiaţi fişierul BIOS curent pe care îl puteţi folosi drept copie de rezervă când BIOS-ul dă erori sau devine corupt în timpul procesului de actualizare.

Copierea BIOS-ului curent

Pentru copierea fişierului BIOS curent folosind utilitarul AFUDOS:

- Asiguraţi-vă că discheta nu este protejată împotriva scrierii şi conţine cel puţin 1024KB de spaţiu liber pentru salvarea fişierului.
- Următoarele ecrane BIOS sunt doar ca referinţe. Afişajele ecranelor BIOS efective pot fi diferite de cele de mai jos.

1. Copiaţi utilitarul AFUDOS (afudos.exe) de pe DVD-ul de asistenţă al plăcii de bază pe discheta de pornire pe care aţi creat-o.
2. Porniţi sistemul în modul DOS, iar la solicitare tastaţi:

   afudos /o[nume fişier]

   unde [nume fişier] este orice nume de fişier desemnat de utilizator, cu cel mult opt caractere alfanumerice pentru numele de fişier principal şi trei caractere alfanumerice pentru numele extensiei.

```
A:\>afudos /oOLDBIOS1.rom
```

Numele de fişier principal **Numele extensiei**

3. Apăsaţi <Enter>. Utilitarul copiază fişierul BIOS curent pe dischetă.

```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

Utilitarul revine la solicitarea DOS după copierea fişierului BIOS curent.

Actualizarea fişierului BIOS

Pentru actualizarea fişierului BIOS folosind utilitarul AFUDOS:

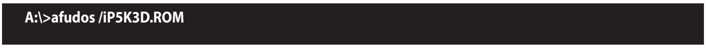
1. Vizitaţi website-ul ASUS (www.asus.com) şi descărcaţi cel mai recent fişier BIOS pentru placa de bază. Salvaţi fişierul BIOS pe o dischetă de pornire.

Notaţi numele fişierului BIOS pe o bucată de hârtie. Trebuie să tastaţi numele fişierului BIOS exact la solicitarea DOS.

2. Copiaţi utilitarul AFUDOS (afudos.exe) de pe DVD-ul de asistenţă al plăcii de bază pe discheta de pornire pe care aţi creat-o.
3. Porniţi sistemul în modul DOS, iar la solicitare tastaţi:

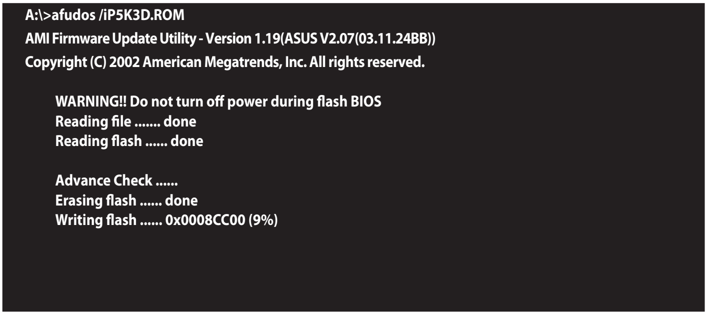
afudos /i[nume fişier]

unde [nume fişier] este cel mai recent fişier sau fişierul BIOS original de pe discheta de pornire.



```
A:\>afudos /iP5K3D.ROM
```

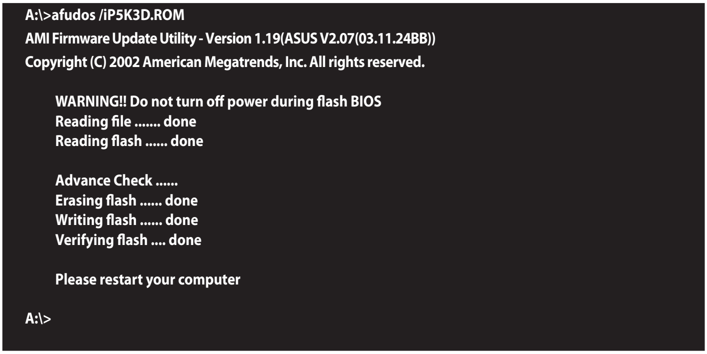
4. Utilitarul verifică fişierul şi porneşte actualizarea BIOS-ului.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Notaţi numele fişierului BIOS pe o bucată de hârtie. Trebuie să tastaţi numele fişierului BIOS exact la solicitarea DOS.

5. Utilitarul revine la solicitarea DOS după încheierea procesului de actualizare BIOS. Reporniţi sistemul din unitatea de hard disk.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Utilitarul de actualizare Award BIOS

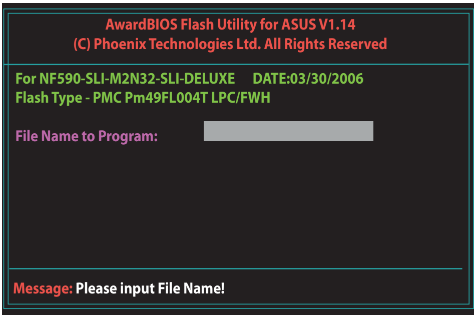
Actualizarea BIOS-ului

Sistemul de intrare-ieşire primar (BIOS) poate fi actualizat folosind utilitarul de actualizare AwardBIOS. Urmaţi aceste instrucţiuni pentru actualizarea BIOS-ului folosind acest utilitar.

1. Descărcaţi cel mai recent fişier BIOS de pe website-ul ASUS. Redenumiţi fişierul ca M2N32SLI.BIN şi salvaţi-l pe o dischetă, un CD ROM sau o unitate flash pentru USB în **format FAT 16/12.**

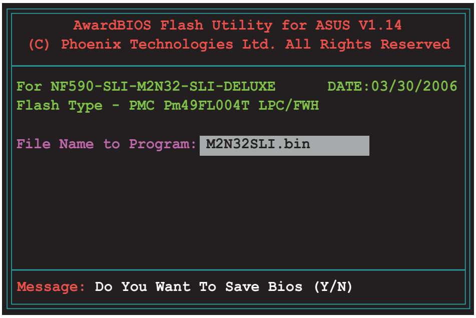
> Salvaţi doar fişierul BIOS actualizat pe disc pentru evitarea încărcării fişierului BIOS greşit.

2. Copiaţi utilitarul de actualizare AwardBIOS (awdflash.exe) din folderul Software al CD-ului de asistenţă pe discheta, CD ROM-ul sau unitatea flash pentru USB cu cel mai recent fişier BIOS.
3. Porniţi sistemul în modul DOS folosind discheta de pornire, CD ROM-ul sau unitatea flash pentru USB pe care aţi creat-o.
4. În modul DOS, folosiţi <X:> (X reprezintă numele atribuirii discului) pentru a comuta la folderul dischetei, CD ROM-ului sau unităţii flash pentru USB în care aţi salvat fişierul BIOS şi utilitarul de actualizare Award BIOS.
5. La solicitare, tastaţi awdflash, apoi apăsaţi <Enter>. Apare ecranul utilitarului de actualizare Award BIOS.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

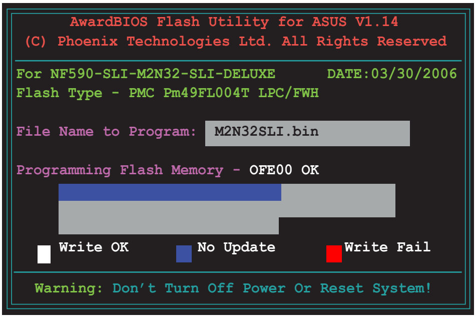
6. Tastaţi numele fişierului BIOS în Nume fişier la câmpul Program, apoi apăsaţi <Enter>.



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C)  Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Apăsaţi <N> când utilitarul vă solicită să salvaţi fişierul BIOS curent. Apare următorul ecran.

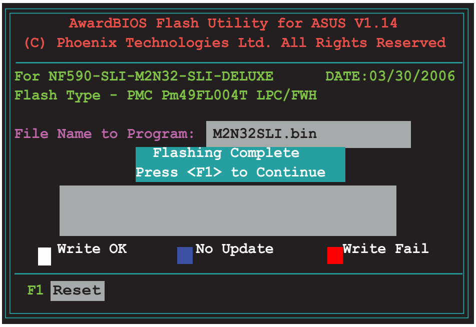
8. Utilitarul verifică fişierul BIOS de pe dischetă, CD ROM sau unitatea flash pentru USB şi porneşte actualizarea fişierului BIOS.



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C)  Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

NU opriţi sau reiniţializaţi sistemul în timpul procesului de actualizare!

9. Utilitarul afişează un mesaj Actualizare completă, indicând faptul că aţi actualizat cu succes fişierul BIOS. Scoateţi discul, apoi apăsaţi <F1> pentru repornirea sistemului.



```
        AwardBIOS Flash Utility for ASUS V1.14
 (C)  Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                    Flashing Complete
                  Press <F1> to Continue

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

 F1 Reset
```

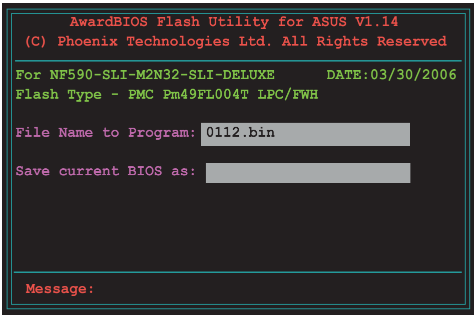
Salvarea fişierului BIOS curent

Puteţi folosi utilitarul de actualizare AwardBIOS pentru salvarea fişierului BIOS curent. Puteţi încărca fişierul BIOS curent când fişierul BIOS devine corupt în timpul procesului de actualizare.

Asiguraţi-vă că discheta, CD ROM-ul sau unitatea flash pentru USB are spaţiu suficient pentru salvarea fişierului.

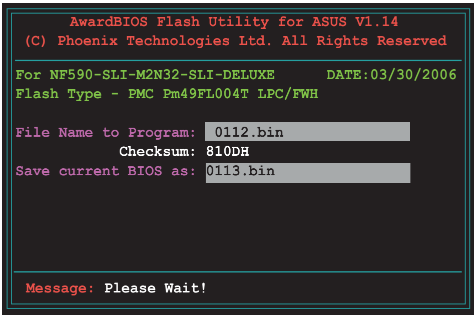
Pentru salvarea fişierului BIOS curent folosind utilitarul de actualizare AwardBIOS:

1. Urmaţi paşii de la 1 la 6 din secţiunea anterioară.
2. Apăsaţi <Y> când utilitarul vă solicită să salvaţi fişierul BIOS curent. Apare următorul ecran.



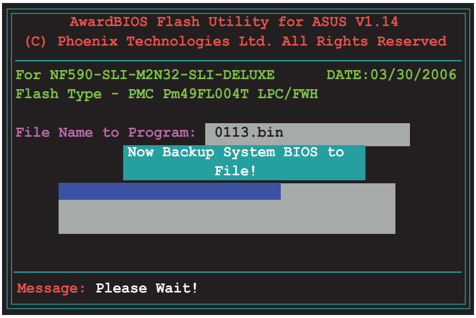
```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Tastaţi un nume de fişier pentru fişierul BIOS curent în câmpul Salvare BIOS curent, apoi apăsaţi <Enter>.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. Utilitarul salvează fişierul BIOS curent pe disc, apoi revine la procesul de actualizare BIOS.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
             Now Backup System BIOS to
                       File!

Message: Please Wait!
```

2.3 Utilitarul Actualizare ASUS

Actualizare ASUS este un utilitar care vă permite să gestionați, salvați şi actualizați BIOS-ul plăcii de bază în mediul Windows®. Utilitarul Actualizare ASUS vă permite să:

- Salvați fişierul BIOS curent
- Descărcați cel mai recent fişier BIOS de pe Internet
- Actualizați BIOS-ul dintr-un fişier BIOS actualizat
- Actualizați BIOS-ul direct de pe Internet şi să
- Vizualizați informațiile despre versiunea BIOS.

Acest utilitar este disponibil pe DVD-ul de asistență care este livrat în pachetul plăcii de bază.

Actualizare ASUS necesită o conexiune la Internet, fie printr-o rețea, fie printr-un furnizor de servicii Internet (ISP).

Instalarea Actualizării ASUS

Pentru instalarea Actualizării ASUS:

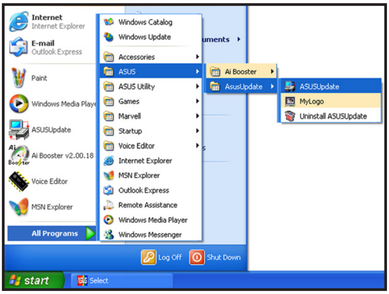
1. Introduceți DVD-ul de asistență în unitatea optică. Apare meniul Drivere.
2. Din meniul **Main (Principal)**, apoi pe Instalare Actualizare ASUS VX.XX.XX.
3. Utilitarul Actualizare ASUS este copiat în sistemul dvs.

Actualizarea BIOS-ului prin Internet

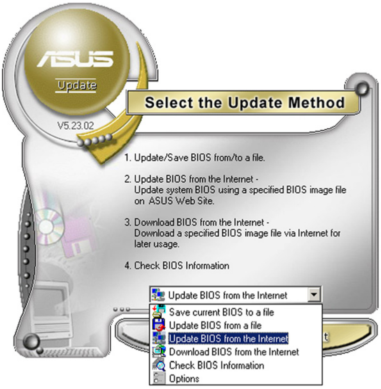
Închideți toate aplicațiile Windows® înainte de actualizarea BIOS-ului folosind acest utilitar.

Pentru actualizarea BIOS-ului prin Internet:

1. Lansați utilitarul Actualizare ASUS din desktop-ul Windows®, făcând clic pe **Start > Programs (Programe) > ASUS > ASUSUpdate (ActualizareASUS) > ASUSUpdate (ActualizareASUS)**. Apare fereastra principală Actualizare ASUS.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

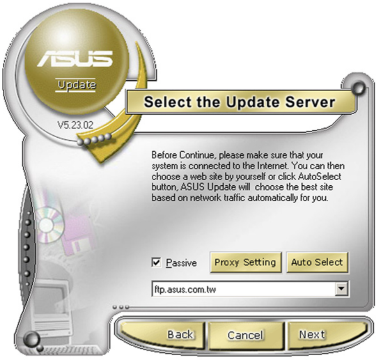
2. Selectați Update BIOS from the internet (Actualizează BIOS de pe internet) din lista de meniu, apoi efectuează click pe Next (Următorul).


ASUS
Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Selectați cel mai apropiat site FTP ASUS pentru evitarea traficului de rețea sau faceți clic pe **Auto Select (**Selectare automată). Faceți clic pe **Next (**Următorul).


ASUS
Update
V5.23.02
Select the Update Server

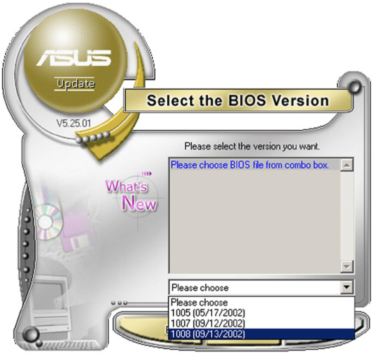
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. În site-ul FTP, selectați versiunea BIOS pe care doriți să o descărcați. Faceți clic pe **Next** (Următorul).


ASUS
Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

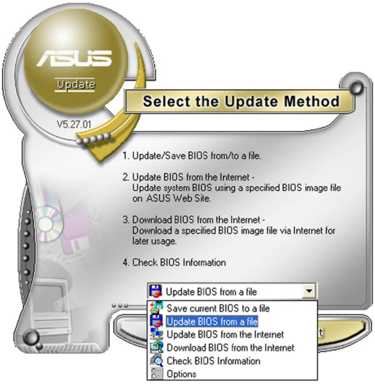
5. Urmați instrucțiunile de pe ecran pentru încheierea procesului de actualizare.

Utilitarul Actualizare ASUS este capabil de auto-actualizare prin Internet. Actualizați întotdeauna utilitarul pentru a beneficia de toate caracteristicile sale.

Actualizarea BIOS-ului printr-un fişier BIOS:

Pentru actualizarea BIOS-ului printr-un fişier BIOS:

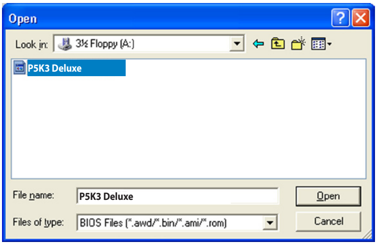
1. Lansaţi utilitarul Actualizare ASUS din desktop-ul Windows®, făcând clic pe **Start** > **Programs (Programe)** > **ASUS** > **ASUSUpdate (ActualizareASUS)** > **ASUSUpdate (ActualizareASUS)**. Apare fereastra principală Actualizare ASUS.
2. Selectaţi Update BIOS from a file (Actualizează BIOS dintr-un fişier) din lista de meniu, apoi faceţi click pe Next (Următorul).


ASUS
Update
V5.27.01
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Localizaţi fişierul BIOS din fereastra Deschidere, apoi faceţi clic pe **Open (**Deschidere).
4. Urmaţi instrucţiunile de pe ecran pentru încheierea procesului de actualizare.


Open
Look in:
3½ Floppy (A:)
P5K3 Deluxe
Open
Cancel

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Asiguraţi-vă că încărcaţi setările iniţiale ale BIOS pentru a asigura sistemului compatibilitate şi stabilitate. Selectaţi articolul Load Setup Defaults (Încarcă setări de configurare) din cadrul meniului Exit (Ieşire).

2.4 ASUS BIOS Updater

Utilitarul ASUS BIOS Updater (Actualizator BIOS ASUS) vă permite să actualizaţi BIOS-ul în mediul DOS. De asemenea, acest utilitar vă permite să copiaţi fişierul BIOS curent pe care îl puteţi utiliza ca o copie de rezervă dacă BIOS-ul nu funcţionează sau dacă se deteriorează în timpul procesului de actualizare.

Următoarele ecrane ale utilitarului sunt numai pentru referinţă. Afişajele ecranelor efective ale utilitarului pot fi diferite de cele de mai jos.

Înainte de actualizare BIOS

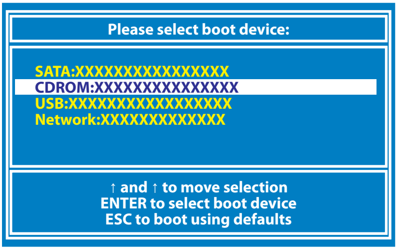
1. Pregătiţi DVD-ul de asistenţă pentru placa de bază şi o unitate flash USB în format FAT32/16 cu o singură partiţie.
2. Descărcaţi cea mai recentă versiune de fişier BIOS şi utilitar BIOS Updater (Actualizator BIOS) de pe site-ul Web ASUS la adresa http://support.asus.com şi salvaţi-le pe unitatea flash USB.

- Formatul NTFS nu este acceptat în mediul DOS. Nu salvaţi fişierul BIOS şi utilitarul BIOS Updater (Actualizator BIOS) pe hard disk sau pe unitatea flash USB în format NTFS.
- Nu salvaţi fişierul BIOS pe o unitate de dischetă datorită capacităţii reduse a discului.

3. Opriţi computerul şi deconectaţi toate hard disk-urile SATA (opţional).

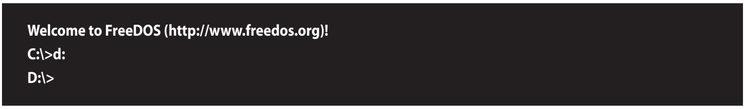
Pornirea sistemului în mediul DOS

1. Introduceţi unitatea flash USB cu cea mai recentă versiune de fişier BIOS şi utilitar BIOS Updater (Actualizator BIOS) în portul USB.
2. Porniţi computerul. Când apare logo-ul ASUS, apăsaţi pe <F8> pentru a afişa **BIOS Boot Device Select Menu (Meniu selectare dispozitiv de pornire BIOS)**. Introduceţi DVD-ul de asistenţă în unitatea optică şi selectaţi unitatea optică drept dispozitiv de pornire.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

↑ and ↑ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Când apare meniul **Make Disk (Creare disc)**, selectaţi elementul **FreeDOS command prompt (Linie de comandă FreeDOS)** apăsând pe numărul elementului.
4. La solicitarea FreeDOS, tastaţi **d:** şi apăsaţi pe <Enter> pentru a comuta discul de la unitatea C (unitatea optică) la unitatea D (unitatea flash USB).



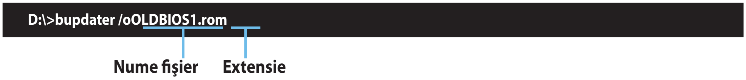
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Copierea de rezervă a fişierului BIOS curent

Pentru copierea de rezervă a fişierului BIOS curent utilizând utilitarul BIOS Updater (Actualizator BIOS)

Asiguraţi-vă că unitatea flash USB nu este protejată împotriva scrierii şi are suficient spaţiu liber pentru salvarea fişierului.

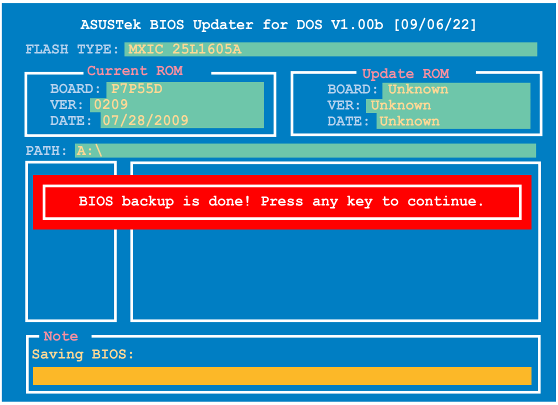
1. La solicitarea FreeDOS, tastaţi **bupdater /o[nume fişier]** şi apăsaţi pe <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

[nume fişier] este orice nume de fişier atribuit de utilizator şi care nu conţine mai mult de opt caractere alfanumerice în numele principal de fişier şi trei caractere în numele de extensie.

2. Se afişează ecranul de copiere de rezervă a utilitarului BIOS Updater indicând procesul de copiere de rezervă pentru BIOS. Când s-a terminat copierea de rezervă a BIOS-ului, apăsaţi pe orice tastă pentru a reveni la linia de comandă din DOS.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
        Current ROM                       Update ROM
   BOARD: P7P55D                     BOARD: Unknown
   VER: 0209                         VER: Unknown
   DATE: 07/28/2009                  DATE: Unknown
PATH: A:\

       BIOS backup is done! Press any key to continue.

  Note
Saving BIOS:
```

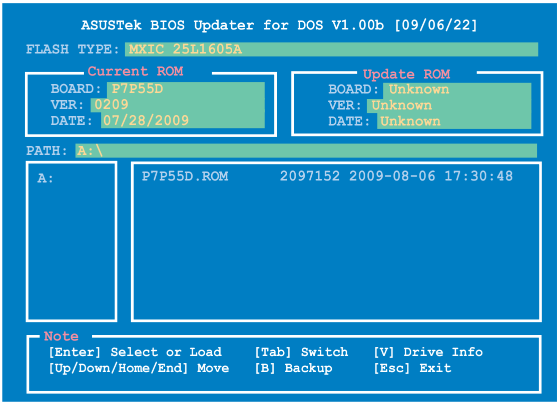
Actualizarea fişierului BIOS

Pentru a actualiza fişierul BIOS utilizând BIOS Updater

1. La solicitarea FreeDOS, tastaţi **bupdater /pc /g** şi apăsaţi pe <Enter>.

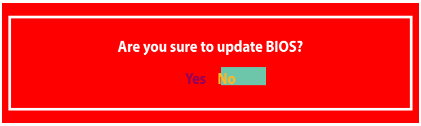
```
D:\>bupdater /pc /g
```

2. Ecranul utilitarului BIOS Updater se afişează ca mai jos.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
     Current ROM                      Update ROM
  BOARD: P7P55D                    BOARD: Unknown
  VER: 0209                        VER: Unknown
  DATE: 07/28/2009                 DATE: Unknown
PATH: A:\
  A:          P7P55D.ROM       2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load     [Tab] Switch     [V] Drive Info
  [Up/Down/Home/End] Move    [B] Backup       [Esc] Exit
```

3. Apăsaţi pe <Tab> (Filă) pentru a comuta între câmpurile ecranului şi utilizaţi tastele <Up/Down/Home/End> (Sus/Jos/Ecran iniţial/Încheiere) pentru a selecta fişierul BIOS şi apăsaţi pe <Enter>. Utilitarul BIOS Updater verifică fişierul BIOS selectat şi vă solicită confirmarea actualizării BIOS-ului.



Are you sure to update BIOS?

Yes No

4. Selectaţi **Yes (Da)** şi apăsaţi pe <Enter>. Când actualizarea BIOS s-a efectuat, apăsaţi pe <ESC> pentru a ieşi din utilitarul BIOS Updater. Reporniţi computerul.

NU închideţi sau reiniţializaţi sistemul în timpul actualizării de BIOS pentru a preveni încărcarea nereuşită a sistemului!

- Pentru BIOS Updater versiunea 1.04 sau ulterioară, utilitarul se închide şi se trece automat la linia de comandă DOS după actualizarea BIOS-ului.
- Verificaţi dacă s-au încărcat setările implicite de BIOS pentru a asigura compatibilitatea şi stabilitatea sistemului. Selectaţi elementul **Load Setup Defaults (Încărcare setări implicite de configurare)** în meniul **Exit (Ieşire)** din BIOS. Pentru detalii consultaţi Capitolul 3 din manualul de utilizare pentru placa de bază.
- Asiguraţi-vă că aţi conectat toate hard disk-urile SATA după actualizarea fişierului BIOS dacă le-aţi deconectat.

Capitolul 3: Depanarea

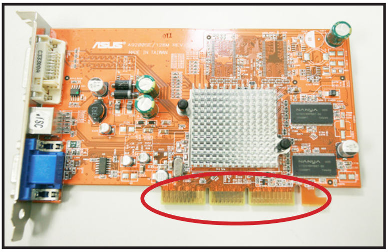
3.1 Depanarea plăcii de bază

După asamblarea calculatorului dvs., vă puteţi confrunta cu probleme în pornirea acestuia. Acest capitol furnizează răspunsuri pentru unele din cele mai commune întrebări despre PC-ul dvs. înainte de pornirea sistemului de operare. Citiţi acest capitol pentru depanarea de bază. Vă economiseşte timpul şi deranjul de a contacta echipa de asistenţă tehnică ASUS sau de a trimite produsul înapoi pentru service în garanţie.

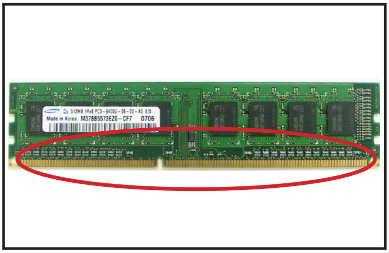
3.1.1 Depanarea de bază

A. Conexiune proastă

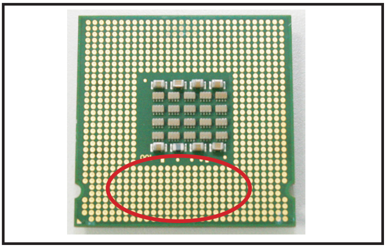
1. Asiguraţi-vă că nu există impurităţi pe contactul auriu sau pe portizolatori.
2. Folosiţi un tampon de vată sau o radieră şi frecaţi cu grijă contactul auriu. Amintiţi-vă să îndepărtaţi resturile de la radieră.



contactul auriu al cartelei VGA



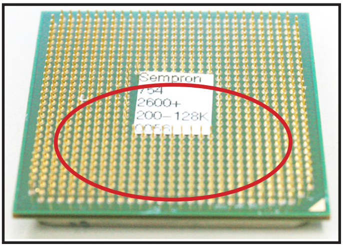
contactul auriu al DIMM-ului



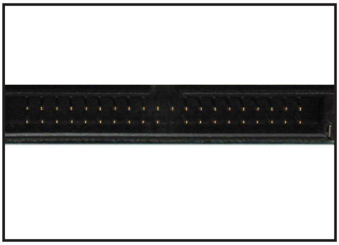
vârfurile contactului auriu al procesorului LGA7775

Manipulaţi cartela sau CPU-ul de margini şi NU atingeţi contactul auriu. Electricitatea statică deteriorează grav dispozitivul.

3. Asiguraţi-vă că nu sunt portizolatori rupţi sau îndoiţi la portizolatorii conectorilor sau ai CPU-ului. Portizolatorii rupţi sau îndoiţi cauzează funcţionarea defectuoasă a componentelor. Contactaţi-vă vânzătorul pentru asistenţă suplimentară.



Portizolatorii aurii ai CPU-ului AMD

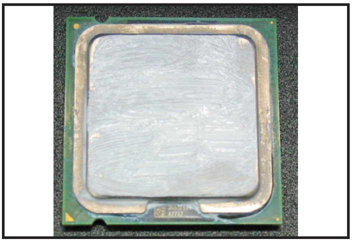


Portizolatorii conectorilor

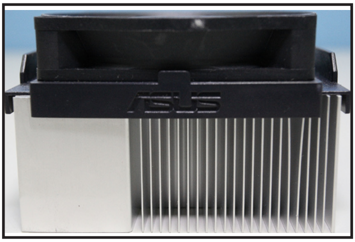
Dacă portizolatorii au fost rupţi sau îndoiţi după cumpărare, vânzătorul vă poate solicita contravaloarea reparaţiei. Uneori, portizolatorii rupţi sau îndoiţi sunt IREPARABILI.

B. Supraîncălzirea CPU-ului

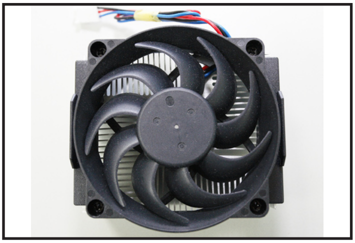
1. Curăţaţi suprafaţa CPU-ului cu o cârpă curată. Aplicaţi câteva picături de pastă termică pe zona expusă a CPU-ului cu care va fi în contact radiatorul. Asiguraţi-vă că aceasta se răspândeşte într-un strat subţire şi uniform.
2. Asiguraţi-vă că nu există impurităţi pe radiator sau ventilator.



Suprafaţa CPU-ului



Vedere laterală a radiatorului şi a ventilatorului



Vedere de sus a radiatorului şi a ventilatorului

3. Urmaţi instrucţiunile producătorului radiatorului şi ventilatorului pentru curăţarea impurităţilor care încetinesc rotaţia ventilatorului.

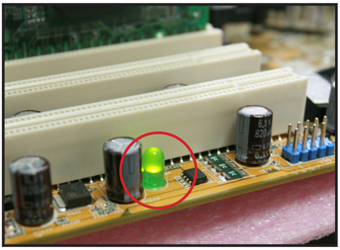
3.2 Alte probleme obişnuite

- Când înlăturaţi dispozitive din sistem, asiguraţi-vă că toate cablurile de alimentare sunt deconectate.
- Toate mesajele de eroare sunt afişate pe ecran în timpul testării automate la punerea sub tensiune (POST).
- Dacă sunt bip-uri ale BIOS-ului, consultaţi secţiunea 1.11 pentru detalii.
- Parcurgeţi tabelul cu lista de verificare de mai jos pentru o verificare suplimentară.

	Elemente verificare					Pagina de referinţă
	LED alimentare	**Afişaj ecran**	**Radiator şi ventilator**	**Bip-uri BIOS**	**Mesaj de eroare**	
Lipsă alimentare	Oprit	Nu	Oprire	Nu	N/A	3-4
Lipsă afişaj ecran	Pornit	Nu	Oprire	Nu	N/A	3-5
	Pornit	Nu	Funcţionare	Nu	N/A	3-5
	Pornit	Nu	Funcţionare	Da	N//A	3-5
Intrare SO nereuşită	Pornit	Da	Funcţionare	Da	Da	3-5
	Pornit	Da	Funcţionare	Nu	Da	3-5
	Pornit	Da	Funcţionare	Nu	Nu	3-5

Dacă problema a fost rezolvată, dar a apărut o nouă problemă, parcurgeţi din nou lista de verificare. Dacă problema persistă, contactaţi-vă vânzătorul sau echipa de asistenţă tehnică ASUS pentru ajutor suplimentar.

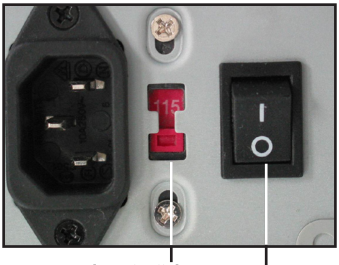
3.2.1 Lipsă alimentare



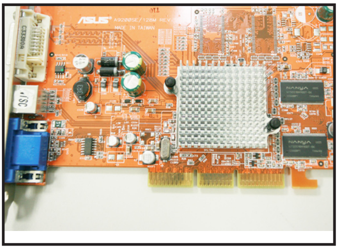
Plăcile de bază ASUS sunt livrate cu un LED de alimentare în stare de veghe. LED se iluminează pentru a indica faptul că sistemul este Pornit. Dacă LED-ul rămâne stins, urmaţi instrucţiunile de mai jos pentru a rezolva problema.

1. Asiguraţi-vă că aţi reglat alimentarea la tensiunea de intrare c.a. corectă în zona dvs. şi că alimentarea este pornită.

   - Înainte de reglarea tensiunii de intrare c.a., asiguraţi-vă că aţi deconectat fişa de alimentare. Nerespectarea acestui lucru deteriorează grav unitatea de alimentare cu curent.
   - Omisiunea de a regla alimentarea la tensiunea de intrare c.a. corectă va deteriora grav sistemul.


115
Comutatorul tensiunii de intrare c.a
Comutatorul de alimentare „-": Pornit; „O": Oprit

2. Asiguraţi-vă că aţi ataşat cablul de alimentare la borna de ieşire din perete.
   - Conectaţi fişa de alimentare direct la borna de ieşire din perete. NU o conectaţi la cablul prelungitor, la sursa de alimentare neîntreruptă (UPS) sau la alte dispozitive.
   - Schimbaţi fişele de alimentare ale sistemului şi monitorului pentru a verifica dacă borna de ieşire din perete funcţionează normal.



3. Dacă problema persistă, ar trebui să vă contactaţi vânzătorul pentru o unitate de alimentare cu curent nouă. Dacă unitatea de alimentare cu curent funcţionează, contactaţi vânzătorul plăcii de bază ASUS pentru service-ul plăcii de bază în garanţie.

3.2.2 Pornirea nereuşită; lipsa afişajului pe ecran

Majoritatea pornirilor nereuşite şi lipsa afişajului pe ecran rezultă din defecţiuni ale dispozitivelor sau instalarea incorectă. Urmaţi instrucţiunile de mai jos pentru rezolvarea problemei.

1. Asiguraţi-vă că toate cablurile de alimentare sunt ataşate, inclusiv ale sistemului şi monitorului.
2. Verificaţi dacă problema vine de la dispozitivele de extensie.
    - Înlăturaţi toate cardurile şi dispozitivele de extensie. Folosiţi doar placa de bază, cartela VGA, modulele de memorie, unitatea de alimentare, radiatorul şi ventilatorul, tastatura şi mouse-ul pentru repornirea sistemului.
    - Dacă sistemul funcţionează normal, unul din dispozitivele de extensie cauzează problema. Reinstalaţi dispozitivele de extensie pe care le-aţi înlăturat unul câte unul şi descoperiţi care este cel defect.
3. Verificaţi dacă problema vine de la dispozitivele sistemului de bază.
    - Dacă aveţi dispozitive de rezervă, puteţi înlocui dispozitivele pe rând pentru a descoperi dispozitivul defect în ordinea “modul de memorie, CPU, placă de bază, unitate de hard disk/optică, tastatură/mouse.”

Când descoperiţi dispozitivul defect, contactaţi vânzătorul dispozitivului pentru service.

3.2.3 Intrarea în sistemul de operare nereuşită

1. Dacă problema apare după adăugarea de hardware. Înlăturaţi hardware-ul nou adăugat şi reporniţi sistemul. Dacă sistemul funcţionează normal fără hardware, dispozitivul poate fi defect sau incompatibil cu sistemul. Contactaţi vânzătorul dispozitivului pentru ajutor.
2. Dacă problema apare după instalarea de software sau driver. Urmaţi instrucţiunile de mai jos pentru rezolvarea problemei.
    a. Intraţi în sistemul de operare în modul de siguranţă şi înlăturaţi software-ul sau driver-ul.

    b. Contactaţi compania furnizoare a sistemului de operare pentru asistenţă suplimentară.

    c. Dacă instrucţiunile anterioare nu reuşesc să resolve problema, ar trebui să vă formataţi unitatea de hard disk şi să reinstalaţi un sistem de operare nou.

3. Dacă problema apare după modificarea setărilor BIOS-ului, reporniţi şi intraţi în BIOS pentru încărcarea setărilor implicite. Consultaţi ghidul utilizatorului plăcii de bază pentru detalii.
4. Dacă problema apare în urma unei infectări cu virus a calculatorului sau a corupţiei fişierelor, urmaţi instrucţiunile de mai jos pentru rezolvarea problemei.
    a. Intraţi în sistemul de operare în modul de siguranţă şi executaţi o scanare completă anti-virus a sistemului folosind o aplicaţie anti-virus.

    b. Contactaţi compania furnizoare a sistemului de operare pentru asistenţă suplimentară.

    c. Dacă instrucţiunile anterioare nu reuşesc să resolve problema, ar trebui să vă formataţi unitatea de hard disk şi să reinstalaţi un sistem de operare nou.

3.2.4 Întrebări frecvente

Î1: Memoria raportată în POST este diferită de memoria instalată.

R1: Diferenţa de memorie raportată poate rezulta din module de memorie defecte sau instalarea incorectă a DIMM-urilor. Asiguraţi-vă că DIMM-urile sunt în stare bună şi sunt instalate corect. Consultaţi ghidul utilizatorului plăcii de bază pentru detalii. Dacă instalaţi o memorie de 4 GB, iar sistemul raportează 3,X GB, este normal.

Î2. Sistemul nu detectează unitatea de dischetă, dar unitatea de dischetă este iluminată.

R2: Cablurile unităţii de dischetă sunt greşit instalate. Verificaţi banda roşie de pe cablu (capătul portizolatorului 1) şi trebuie să se potrivească cu Portizolator 1 de pe unitatea de dischetă.

Î3: Intrare în sistemul de operare nereuşită după unitatea flash pentru USB sau unitatea de hard disk extern.

R3: Când sistemul detectează o unitatea flash pentru USB sau unităţi de hard disk cu interfaţă USB, poate schimba prioritatea dispozitivului de pornire. Înlăturaţi dispozitivele USB şi reporniţi sistemul.

Î4: La instalarea Windows XP, acesta nu reuşeşte să localizeze unităţile de hard disk instalate la controlerul RAID.

R4: Windows XP nu include driver-ul pentru controlerul RAID, astfel încât unităţile de hard disk nu sunt detectate. Copiaţi driver-ul pentru controlerul RAID pe o dischetă, iar când porniţi sistemul cu discul Windows XP, apăsaţi <F6> pentru citirea driver-ului de pe dischetă. Consultaţi ghidul utilizatorului plăcii de bază pentru detalii.

Capitolul 4: Sfaturi pentru îngrijirea calculatorului

4.1 Îngrijirea corectă a PC-ului dvs.

Calculatorul dvs. personal este la fel ca alte aparate casnice. Păstraţi calculatorul ferit de umiditate, lumina directă a soarelui sau surse de electricitate statică. Nu trebuie să mutaţi calculatorul când este pornit, acesta putându-se deteriora. Praful din interior afectează operarea unităţii de disc şi contribuie la problema supraîncălzirii, care cauzează căderea calculatorului sau deteriorarea componentelor.

4.2 Cunoştinţe de bază

1. Acoperiţi calculatorul cu o husă anti-praf când nu este în funcţiune.
2. Când folosiţi calculatorul, nu aşezaţi nimic pe monitorul, pentru a nu bloca gurile de ventilaţie. Căldura excesivă cauzează funcţionarea defectuoasă a monitorului.
3. Nu amplasaţi calculatorul aproape de perete, lăsaţi un spaţiu pentru disiparea căldurii. Supraîncălzirea cauzează căderea sistemului.
4. Aşezaţi calculatorul pe o suprafaţă stabilă.
5. Păstraţi calculatorul ferit de zone de temperatură extremă. Între 5°C şi 30°C este cea mai bună temperatură ambientală. Folosiţi un aparat de aer condiţionat sau un ventilator electric pentru o mai bună disipare a căldurii.
6. Aranjaţi cablurile-bandă îngrijit pentru evitarea circulaţiei insuficiente a aerului.

4.3 Cunoştinţe de utilizare

1. Porniţi şi opriţi regulat calculatorul. Dacă acesta trebuie să rămână pornit o perioadă mai lungă de timp, folosiţi un ventilator pentru CPU/sistem mai bun şi o unitate de alimentare cu tensiune înaltă.
2. O pană de curent subită deteriorează unitatea de hard disk. Când alimentarea cu curent este instabilă, se recomandă adăugarea unei surse de alimentare neîntreruptă la calculatorul dvs.
3. Rearanjaţi fişierele de date, efectuaţi scanarea de viruşi şi reînnoirea codurilor de viruşi şi defragmentaţi regulat hard disk-ul.
4. Desprăfuiţi şi curăţaţi regulat calculatorul. (Deconectaţi toate cablurile de alimentare înainte de curăţare.)
    - Dezinstalaţi placa de bază şi unităţile de hard disk/optice, apoi curăţaţi-le cu aer închis sau o perie moale.
    - Înlăturaţi praful şi urmele de păr de pe unitatea de alimentare prin aspirare anti-statică.

4.4 Sfaturi

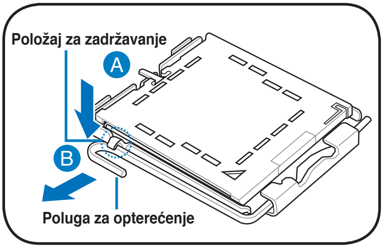
1. Dacă nu veţi folosi calculatorul o perioadă mai lungă de timp, puneţi agenți deshidratanți pentru absorbirea umezelii în şasiu pentru prevenirea deteriorării cauzate de umiditate.
2. În zone cu climă caldă şi umedă, este mai bine să porniţi calculatorul o dată la două săptămâni. Aceasta ajută la prevenirea deteriorării cauzate de umiditate

Poglavlje 1: Brza instalacija

1.1 Instaliranje procesora

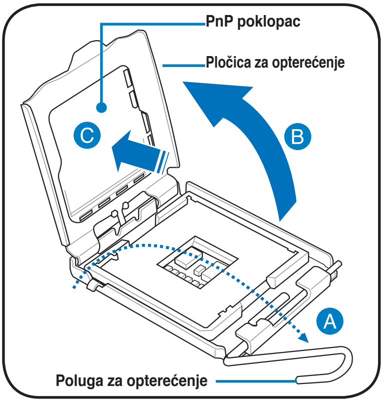
1.1.1 Intel® LGA775 podnožje

1. Pronađite podnožje za procesor na matičnoj ploči.
2. Pritisnite polugu za opterećenje palcem (A), potom je pomerite u levo (B) dok se ne oslobodi iz položaja za zadržavanje.

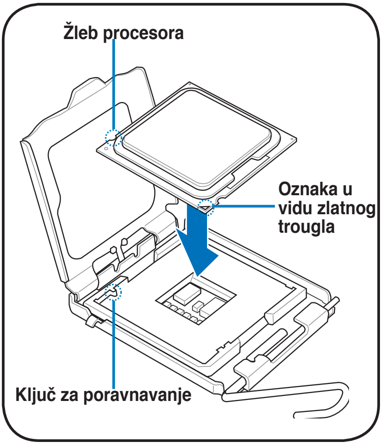

Položaj za zadržavanje
A
B
Poluga za opterećenje

Da bi sprečili oštećivanje čioda podnožja, ne uklanjajte PnP poklopac osim ukoliko ne instalirate procesor.

3. Podignite polugu za opterećenje u smeru strelice do ugla od 135º.
4. Podignite pločicu za opterećenje palcem i kažiprstom do ugla od 100º. (4A), potom gurnite PnP poklopac sa prozora pločice za opterećenje da uklonite (4B).

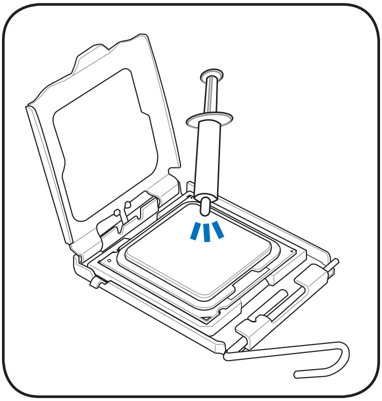

PnP poklopac
Pločica za opterećenje
C
B
A
Poluga za opterećenje

5. Postavite procesor iznad podnožja i proverite da je zlatni trougao u donjem desnom uglu podnožja i potom ubacite ključ za poravnavanje podnožja u žleb na procesoru.



Procesor će ulеći samo na jedan ispravan način. NEMOJTE da na silu uteravate procesor u podnožje kako bi sprečili savijanje konektora na čašici i oštećenje procesora!

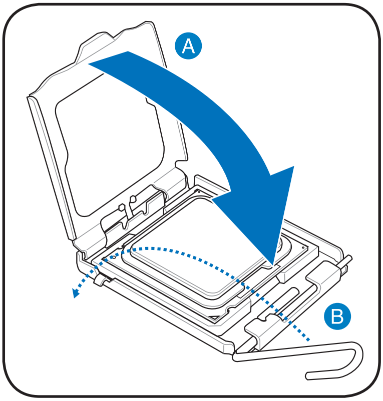
6. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

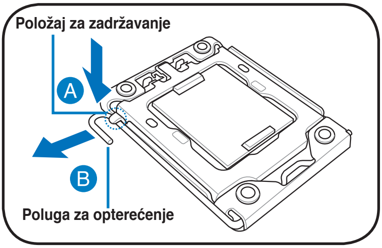
7. Zatvorite pločicu za opterećenje (A), potom furnite ručicu za opterećenje (B) dok ne klikne u položaj za zadržavanje.



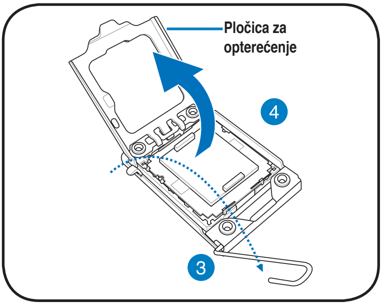
1.1.2 Intel® LGA1366 podnožje

1. Pronađite podnožje za procesor na matičnoj ploči.
2. Pritisnite polugu za opterećenje palcem (A), potom je pomerite u levo (B) dok se ne oslobodi iz položaja za zadržavanje.

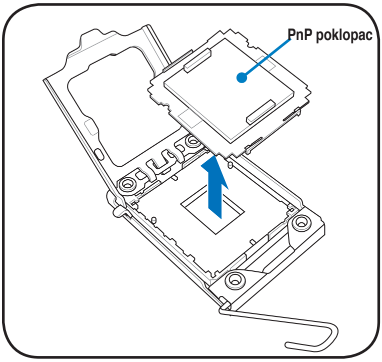
Da bi sprečili oštećivanje čioda podnožja, ne uklanjajte PnP poklopac osim ukoliko ne instalirate procesor.


Položaj za zadržavanje
A
B
Poluga za opterećenje

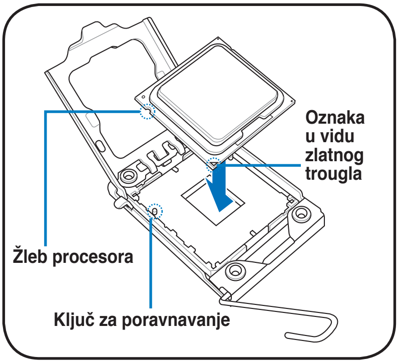
3. Podignite polugu za opterećenje u smeru strelice do ugla od 135º.
4. Podignite pločicu za opterećenje palcem i kažiprstom do ugla od 100º.


Pločica za opterećenje
4
3

5. Uklanja PnP poklopac iz podnožja procesora.

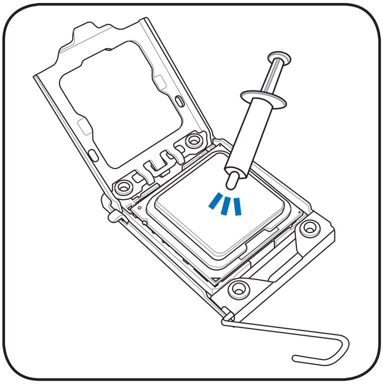

PnP poklopac

6. Postavite procesor iznad podnožja i proverite da je zlatni trougao u donjem desnom uglu podnožja i potom ubacite ključ za poravnavanje podnožja u žleb na procesoru.



Procesor će uleći samo na jedan ispravan način. NEMOJTE da na silu uteravate procesor u podnožje kako bi sprečili savijanje konektora na čašici i oštećenje procesora!

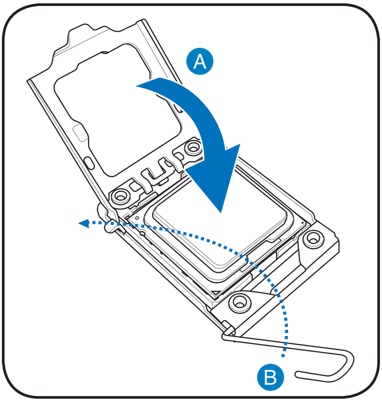
7. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

8. Zatvorite pločicu za opterećenje (A), potom furnite ručicu za opterećenje (B) dok ne klikne u položaj za zadržavanje.

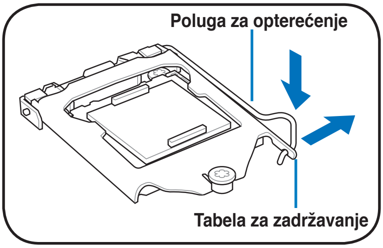


1.1.3 Intel® LGA1156 podnožje

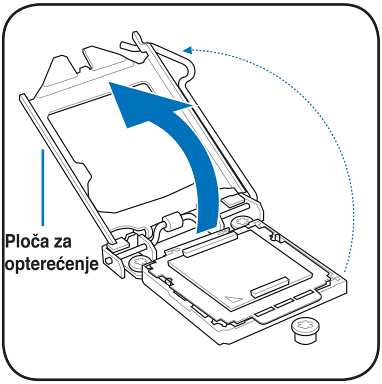
LGA1155 CPU nije kompatibilan sa LGA1156 čašicom. NE INSTALIRAJTE LGA1155 CPU u LGA1156 podnožje.

1. Pronađite podnožje za procesor na matičnoj ploči.
2. Pritisnite polugu za opterećenje palcem (A), a potom je pomerite u desno (B) dok se otpusti iz tabele za zadržavanje.

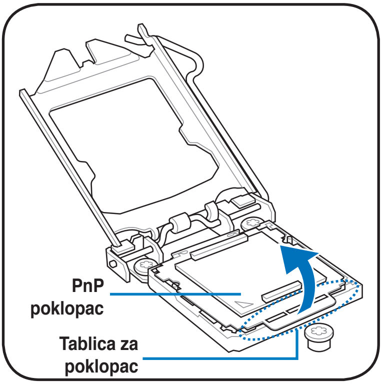
Da biste sprečili oštećenje čioda podnožja, ne uklanjajte PnP kapicu osim ukoliko instalirate procesor.


Poluga za opterećenje
Tabela za zadržavanje

3. Podignite polugu za optrerećenje u smeru strelice dok se ploča za opterećenje u potpunosti ne podigne.

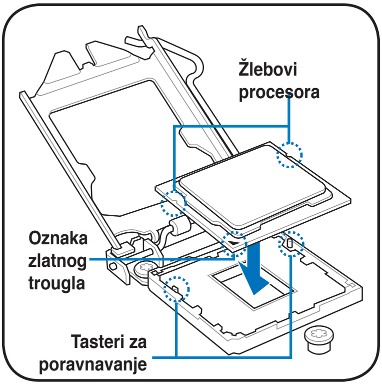

Ploča za opterećenje

4. Uklonite PnP poklopac sa CPU podnožja isključivo podizanjem ploče.


PnP poklopac
Tablica za poklopac

5. Postavite procesor preko podnožja i proverite da je zlatni trougao u donjem-levom uglu podnožja, a potom uklopite tastere za poravnavanje podnožja u žlebove procesora.

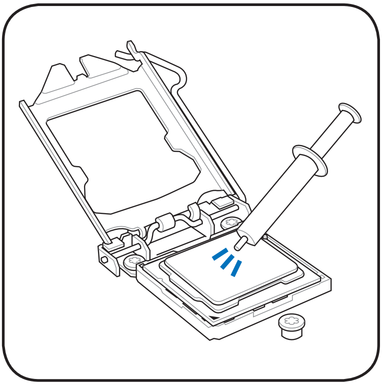
Procesor se uklapa okrenut samo na jedan ispravan način. NEMOJTE da na silu gurate procesor u podnožje, kako bi se sprečilo savijanje konektora na čašici i oštećivanje procesora!



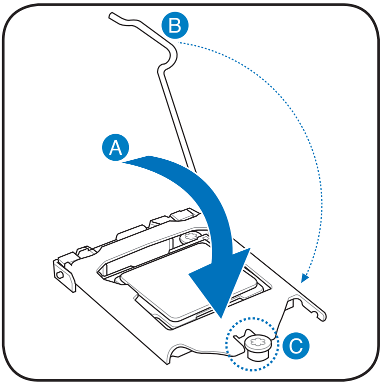
6. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.

Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

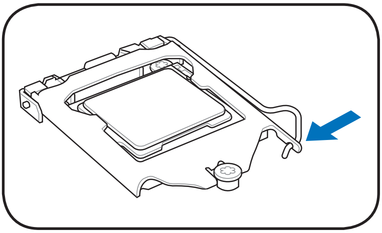
Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.



7. Zatvorite pločicu za opterećenje (A) a potom gurnite naniže polugu za opterećenje (B), obezbeđujući da prednja ivica ploče za opterećenje uklizava ispod bravice za zadržavanje (C).



8. Ubacite polugu za opterećenje ispod tabele za zadržavanje.

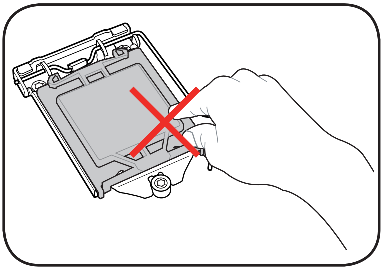


1.1.4 Intel® LGA1155 podnožje (PnP poklopac na pločici za opterećenje)

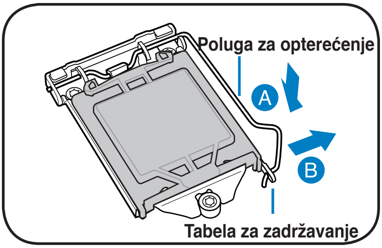
LGA1156 CPU nije kompatibilan sa LGA1155 čašicom. NE INSTALIRAJTE LGA1156 CPU u LGA1155 podnožje.

1. Pronađite podnožje za procesor na matičnoj ploči.

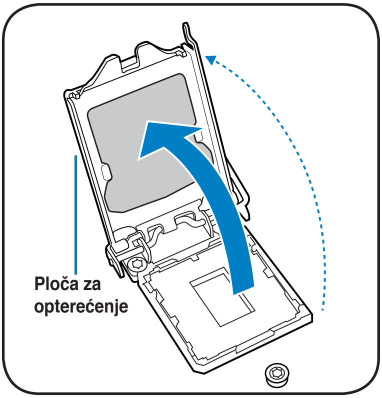
2. Proverite da niste skinuli PnP poklopac sa čašice procesora pre nego što instalirate procesor.



3. Pritisnite polugu za opterećenje palcem (A), a potom je pomerite u desno (B) dok se otpusti iz tabele za zadržavanje.

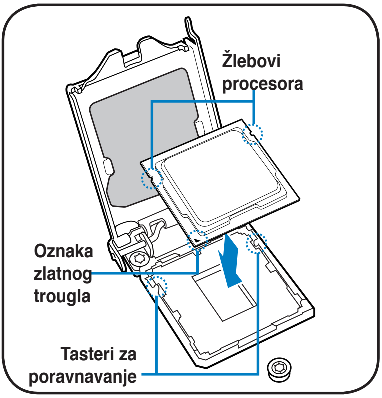

Poluga za opterećenje
A
B
Tabela za zadržavanje

4. Podignite polugu za optrerećenje u smeru strelice dok se ploča za opterećenje u potpunosti ne podigne.

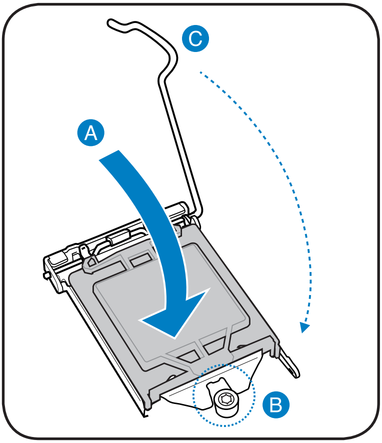

Ploča za opterećenje

5. Postavite procesor preko podnožja i proverite da je zlatni trougao u donjem-levom uglu podnožja, a potom uklopite tastere za poravnavanje podnožja u žlebove procesora.

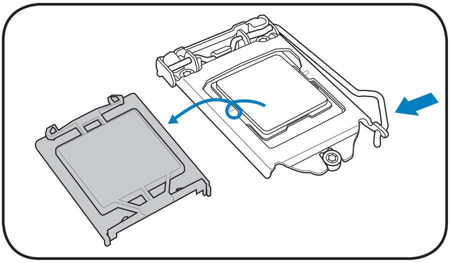
Procesor se uklapa okrenut samo na jedan ispravan način. NEMOJTE da na silu gurate procesor u podnožje, kako bi se sprečilo savijanje konektora na čašici i oštećivanje procesora!


Žlebovi procesora
Oznaka zlatnog trougla
Tasteri za poravnavanje

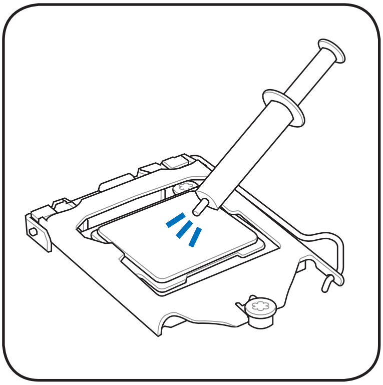
6. Zatvorite pločicu za opterećenje (A), obezbeđujući da prednja ivica pločice za opterećenje uklizava ispod retencione brave (B). Potom gurnite naniže polugu za opterećenje (C).



7. Ubacite polugu za opterećenje ispod retencione brave da uklonite PnP poklopac iz čašice procesora.



8. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

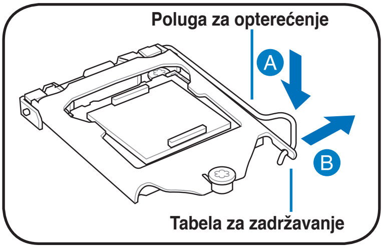
1.1.5 Intel® LGA1155 podnožje (PnP poklopac ispod pločice za opterećenje)

LGA1156 CPU nije kompatibilan sa LGA1155 čašicom. NE INSTALIRAJTE LGA1156 CPU u LGA1155 podnožje.

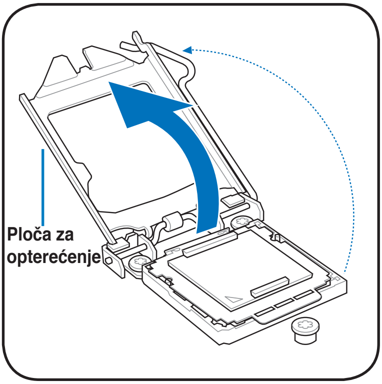
1. Pronađite podnožje za procesor na matičnoj ploči.

2. Pritisnite polugu za opterećenje palcem (A), a potom je pomerite u desno (B) dok se otpusti iz tabele za zadržavanje.

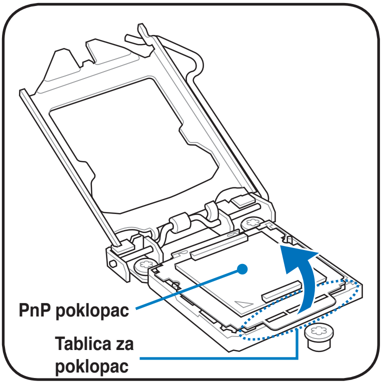
Da biste sprečili oštećenje čioda podnožja, ne uklanjajte PnP kapicu osim ukoliko instalirate procesor.


Poluga za opterećenje
A
B
Tabela za zadržavanje

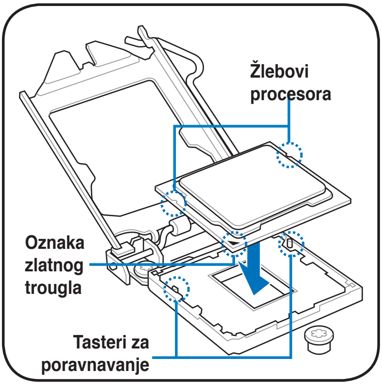
3. Podignite polugu za optrerećenje u smeru strelice dok se ploča za opterećenje u potpunosti ne podigne.


Ploča za opterećenje

4. Uklonite PnP poklopac sa CPU podnožja isključivo podizanjem ploče.

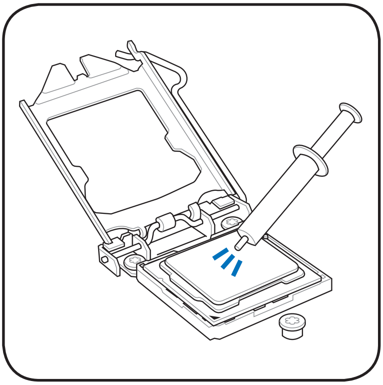

PnP poklopac
Tablica za poklopac

5. Postavite procesor preko podnožja i proverite da je zlatni trougao u donjem-levom uglu podnožja, a potom uklopite tastere za poravnavanje podnožja u žlebove procesora.



Procesor se uklapa okrenut samo na jedan ispravan način. NEMOJTE da na silu gurate procesor u podnožje, kako bi se sprečilo savijanje konektora na čašici i oštećivanje procesora!

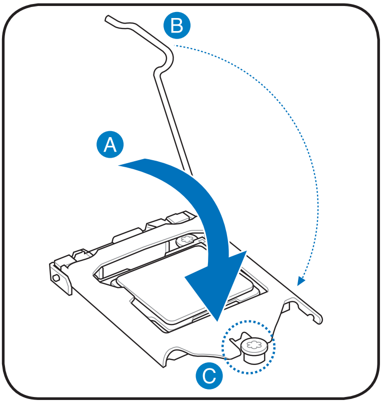
6. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



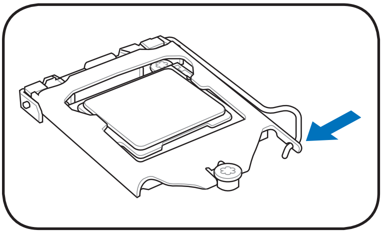
Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

7. Zatvorite pločicu za opterećenje (A) a potom gurnite naniže polugu za opterećenje (B), obezbeđujući da prednja ivica ploče za opterećenje uklizava ispod bravice za zadržavanje (C).



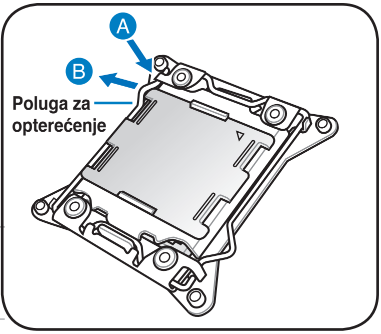
8. Ubacite polugu za opterećenje ispod tabele za zadržavanje.



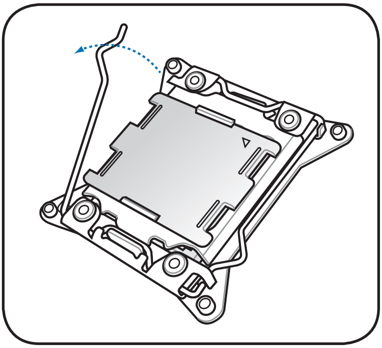
1.1.6 Intel® LGA2011 podnožje

1. Pronađite podnožje za procesor na matičnoj ploči.
2. Pritisnite polugu za opterećenje palcem (A), potom je pomerite u levo (B) dok se ne oslobodi iz položaja za zadržavanje.

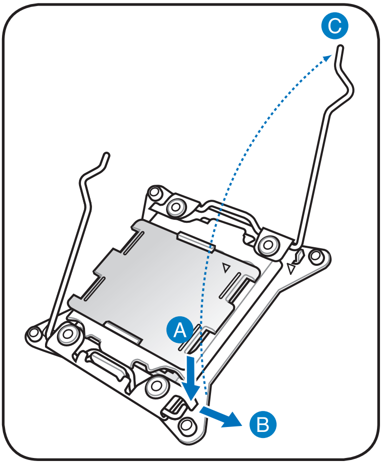
Da bi sprečili oštećivanje čioda podnožja, ne uklanjajte PnP poklopac osim ukoliko ne instalirate procesor.



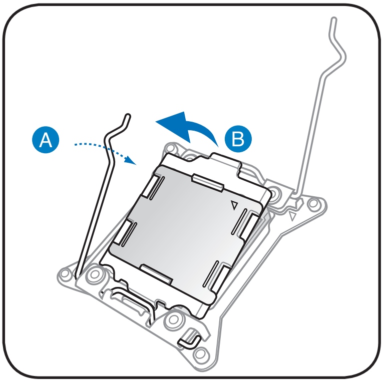
3. Podignite malo polugu za opterećenje u smeru strelice.



4. Zatvorite pločicu za opterećenje (A) a potom gurnite naniže polugu za opterećenje (B), obezbeđujući da prednja ivica ploče za opterećenje uklizava ispod bravice za zadržavanje (C). Podignite malo polugu za opterećenje u smeru strelice (C).

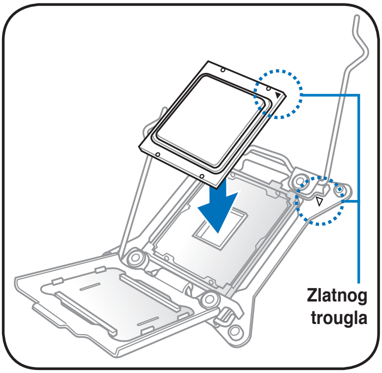


5. Gurnite levu polugu za opterećenje (A) da podignete pločicu za opterećenje (B).

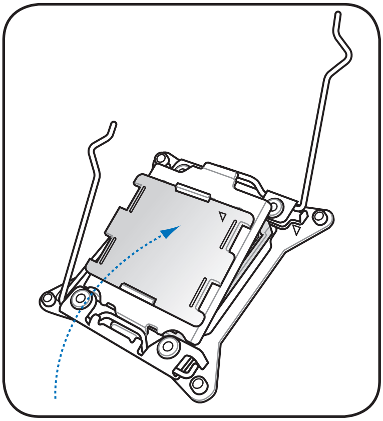


6. Postavite CPU preko čašice, i proverite da se trougao nalazi u gornjem desnom uglu čašice.

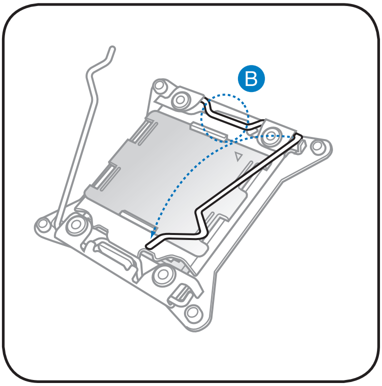
Procesor će uleći samo na jedan ispravan način. NEMOJTE da na silu uteravate procesor u podnožje kako bi sprečili savijanje konektora na čašici i oštećenje procesora!



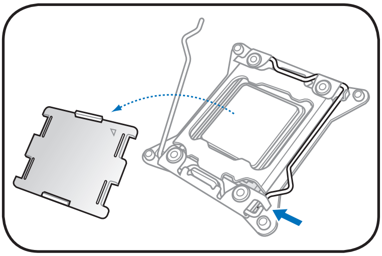
7. Zatvorite pločicu za opterećenje.



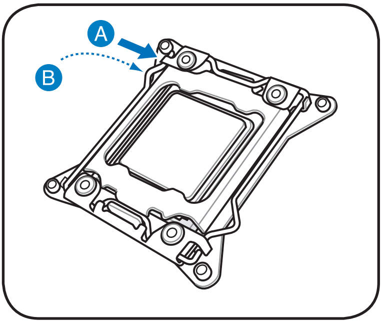
8. Gurnite naniže desnu polugu za opterećenje (A), tako da poluga (B) fiksira ivicu pločice za opterećenje.



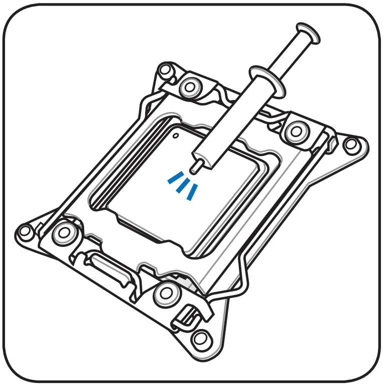
9. Ubacite desnu polugu za opterećenje ispod tablice za zadržavanje. Izvadite PnP poklopac iz čašice procesora.



10. Gurnite naniže levu polugu za opterećenje (A), a potom ubacite polugu ispod tablice za zadržavanje (B).



11. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.

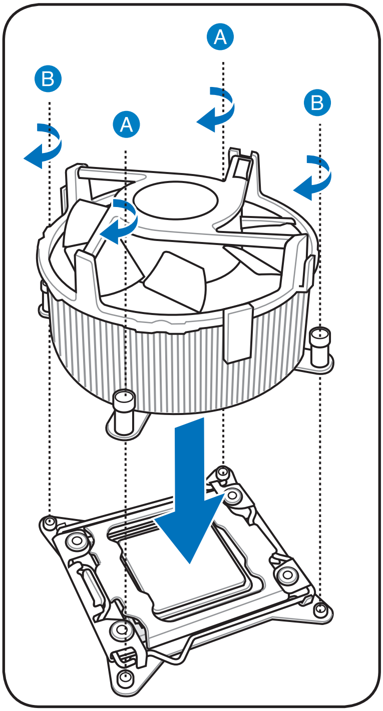


Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

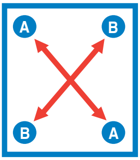
Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

12. Postavite rashladni profil na vrh instaliranog procesora, proveravajući da se četiri zavrtnja poklapaju sa rupicama na čašici procesora.

13. Zavrtite svaki od četiri zavrtnja Filipsovim (zvezdastim) odvijačem samo koliko je dovoljno da prikačite rashladni profil za čašicu procesora. kada su četiri zavrtnja prikačena, pričvrstite ih dobro, jedan po jedan, za rashladni profil.



Pričvrstite četiri zavrtnja za rashladni profil u dijagonalnoj sekvenci.

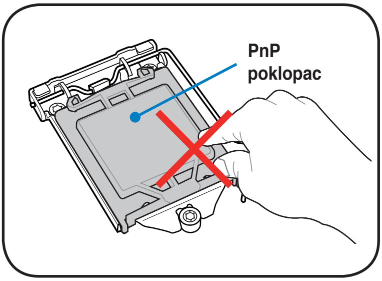


1.1.7 Intel® LGA1150 podnožje (PnP poklopac na pločici za opterećenje)

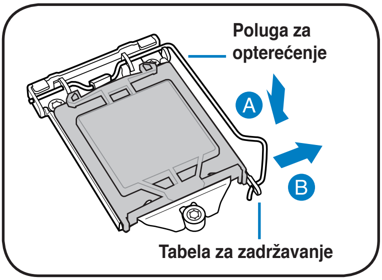
Obavezno instalirajte korektan procesor, dizajniran isključivo za LGA1150. NEMOJTE da instalirate procesor dizajniran za LGA1155 i LGA1156 čašice na LGA1150 čašicu.

1. Pronađite podnožje za procesor na matičnoj ploči.

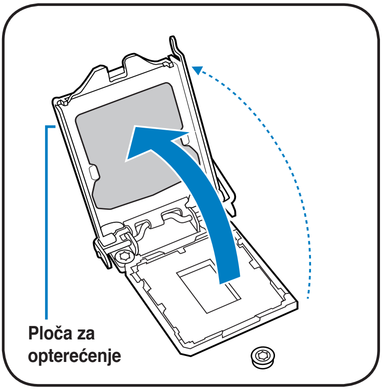
NEMOJTE još uvek da uklanjate PnP poklopac sa čašice procesora. Njegovo uklanjanje može da savije čiode čašice. Pogledajte ilustraciju ispod za lokaciju PnP kapice.


PnP
poklopac

2. Pritisnite polugu za opterećenje palcem (A), a potom je pomerite u desno (B) dok se otpusti iz tabele za zadržavanje.

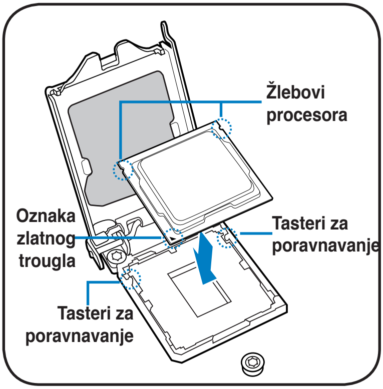

Poluga za
opterećenje
A
B
Tabela za zadržavanje

3. Podignite polugu za optrerećenje u smeru strelice dok se ploča za opterećenje u potpunosti ne podigne.

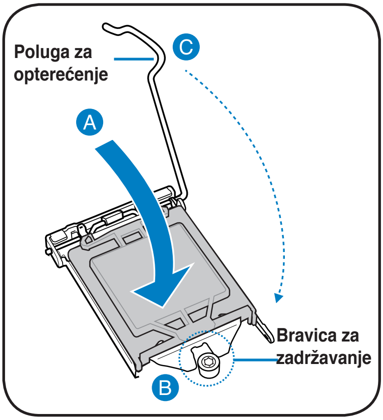

Ploča za
opterećenje

4. Postavite procesor preko podnožja i proverite da je zlatni trougao u donjem-levom uglu podnožja, potom uklopite žlebove procesora za ključevima za poravnanje čašice.

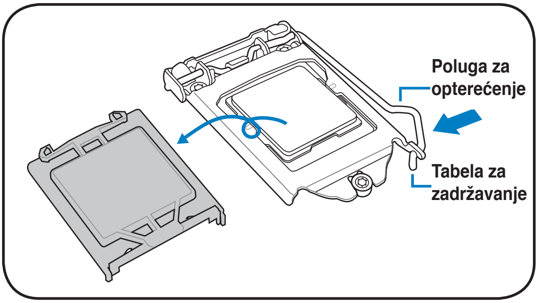
Procesor se uklapa okrenut samo na jedan ispravan način. NEMOJTE da na silu gurate procesor u podnožje, kako bi se sprečilo savijanje konektora na čašici i oštećivanje procesora.


Žlebovi procesora
Oznaka zlatnog trougla
Tasteri za poravnavanje
Tasteri za poravnavanje

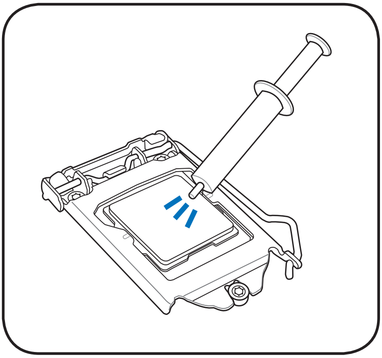
5. Zatvorite pločicu za opterećenje (A), obezbeđujući da prednja ivica pločice za opterećenje uklizava ispod retencione brave (B). Potom gurnite naniže polugu za opterećenje (C).


Poluga za opterećenje
C
A
Bravica za zadržavanje
B

6. Ubacite polugu za opterećenje ispod retencione brave da uklonite PnP poklopac iz čašice procesora.


Poluga za opterećenje
Tabela za zadržavanje

7. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

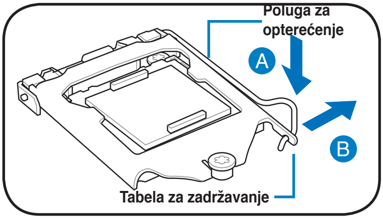
Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

1.1.8 Intel® LGA1150 podnožje (PnP poklopac ispod pločice za opterećenje)

⚠ Obavezno instalirajte korektan procesor, dizajniran isključivo za LGA1150. NEMOJTE da instalirate procesor dizajniran za LGA1155 i LGA1156 čašice na LGA1150 čašicu.

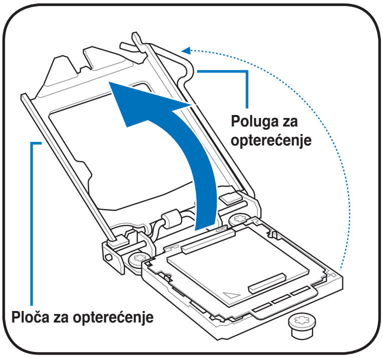
1. Pronađite podnožje za procesor na matičnoj ploči.

2. Pritisnite polugu za opterećenje palcem (A), a potom je pomerite u desno (B) dok se otpusti iz tabele za zadržavanje.


Poluga za opterećenje
A
B
Tabela za zadržavanje

⚠ NEMOJTE još uvek da uklanjate PnP poklopac sa čašice procesora. Njegovo uklanjanje može da savije čiode čašice.

3. Podignite polugu za optrerećenje u smeru strelice dok se ploča za opterećenje u potpunosti ne podigne.


Poluga za opterećenje
Ploča za opterećenje

4. Uklonite PnP poklopac sa CPU podnožja isključivo podizanjem ploče.

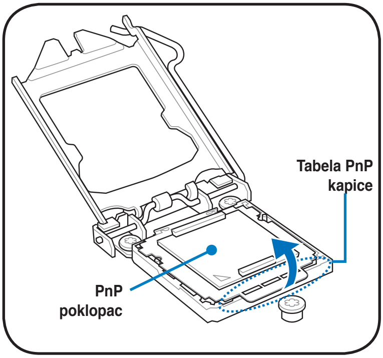
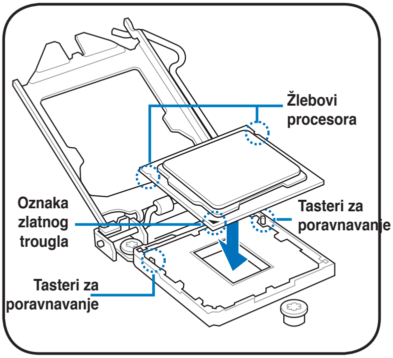


Tabela PnP kapice
PnP poklopac

5. Postavite procesor preko podnožja i proverite da je zlatni trougao u donjem-levom uglu podnožja, potom uklopite žlebove procesora za ključevima za poravnanje čašice.

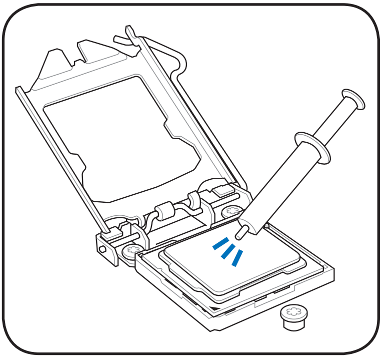
Procesor se uklapa okrenut samo na jedan ispravan način. NEMOJTE da na silu gurate procesor u podnožje, kako bi se sprečilo savijanje konektora na čašici i oštećivanje procesora.


Žlebovi procesora
Oznaka zlatnog trougla
Tasteri za poravnavanje
Tasteri za poravnavanje

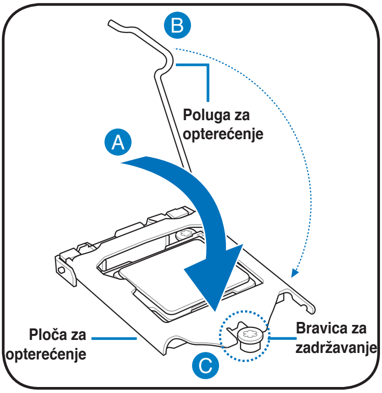
6. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.

Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

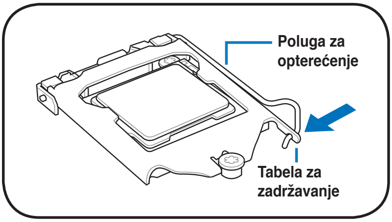
Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.



7. Zatvorite pločicu za opterećenje (A) a potom gurnite naniže polugu za opterećenje (B), obezbeđujući da prednja ivica ploče za opterećenje uklizava ispod bravice za zadržavanje (C).


B
Poluga za opterećenje
A
Ploča za opterećenje
C
Bravica za zadržavanje

8. Ubacite polugu za opterećenje ispod tabele za zadržavanje.

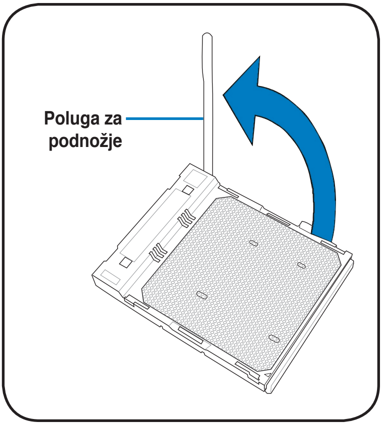

Poluga za opterećenje
Tabela za zadržavanje

1.1.9 AMD AM2 / AM2+ / AM3 podnožje

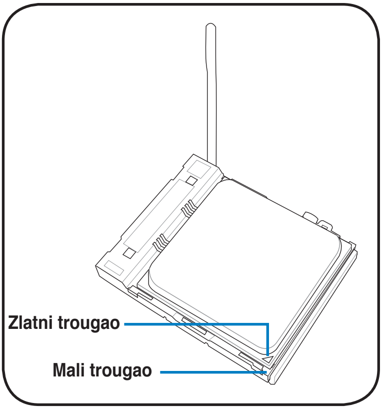
- AMD AM2 i AM2+ podnožja su kompatibilna sa AMD AM2, AM2+ i AM3 procesorima
- AMD AM3 podnožje je kompatibilno samo sa AMD AM3 procesorom. NEMOJTE NIKADA postavljati AMD AM2+/AM2 procesore na AM# podnožje. Samo pojedine AM3 matične ploče podržavaju AM3+ procesore uz korišćenje novog BIOSa. Za više detalja proverite na internet na sajtu ASUS podrške.

1. Pronađite podnožje za processor na matičnoj ploči.
2. Otključajte podnožje pritiskom na polugu sa strane i onda je podignite za 90º.

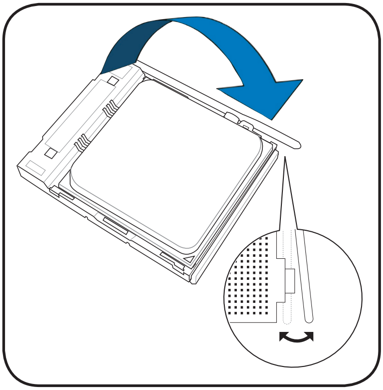
Budite sigurni da je ručica podignuta do 90º jer u suprotnom procesor neće biti dobro postavljen na predviđeno mesto.



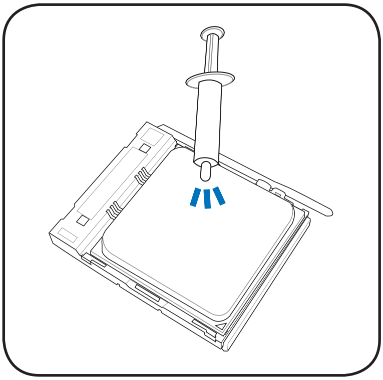
3. Postavite procesor iznad podnožja tako da se ugao procesora sa zlatnim trouglom uklopi sa uglom podnožja sa malim trouglom.
4. Pažljivo ubacite procesor u podnožje dok ne upadne na mesto.



5. Kada je procesor na mestu, pritisnite ručicu podnožja da bi pričvrstili procesor. Ručica se uglaba na tabelu sa strane koja je blokirana.



6. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

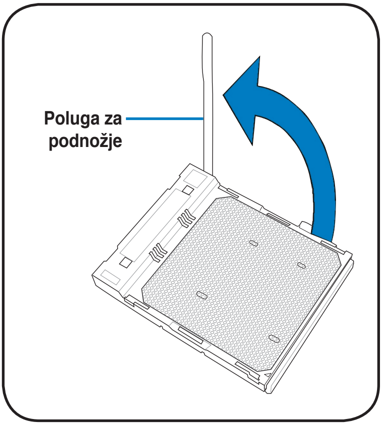
Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

1.1.10 AMD AM3+ podnožje

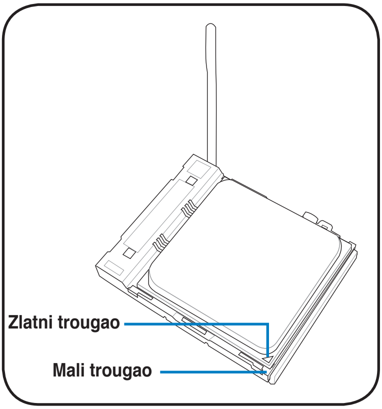
AMD AM3+ podnožje je kompatibilno sa AMD AM3+ i AM3 procesorima. Samo pojedine AM3 matične ploče podržavaju AM3+ procesore uz korišćenje novog BIOSa. Za više detalja proverite na internet na sajtu ASUS podrške.

1. Pronađite podnožje za processor na matičnoj ploči.
2. Otključajte podnožje pritiskom na polugu sa strane i onda je podignite za 90º.

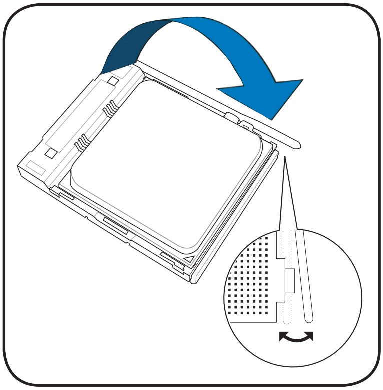
Budite sigurni da je ručica podignuta do 90º jer u suprotnom procesor neće biti dobro postavljen na predviđeno mesto.



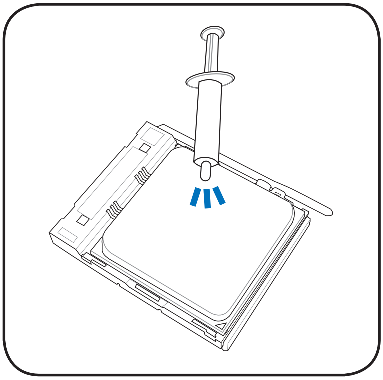
3. Postavite procesor iznad podnožja tako da se ugao procesora sa zlatnim trouglom uklopi sa uglom podnožja sa malim trouglom.
4. Pažljivo ubacite procesor u podnožje dok ne upadne na mesto.



5. Kada je procesor na mestu, pritisnite ručicu podnožja da bi pričvrstili procesor. Ručica se uglaba na tabelu sa strane koja je blokirana.



6. Upotrebite termalni interfejs materijal na izloženo područje procesora sa kojim će rashladni profil biti u dodiru, i proverite da je materijal namazan u ravnomernom, tankom sloju.



Neki rashladni profili dolaze sa već namazanom termalnom pastom. Ukoliko je to slučaj sa vašim profilom, preskočite ovaj korak.

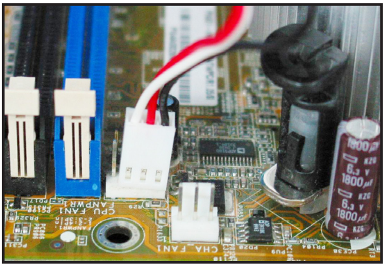
Termalni interfejs materijal je toksičan i ne sme se pojesti. NEMOJTE da ga pojedete. Ukoliko dospe u vaše oči ili dođe u dodir sa vašom kožom, odmah isperite i potražite profesionalnu medicinsku pomoć.

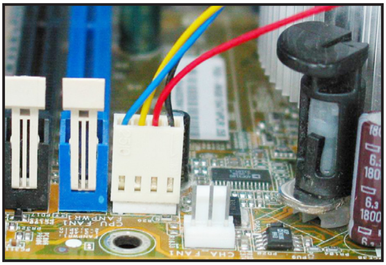
Srpski

1.2 Instaliranje rashladnog profila i ventilatora

Da bi instalirali rashladni profil i ventilator procesora:

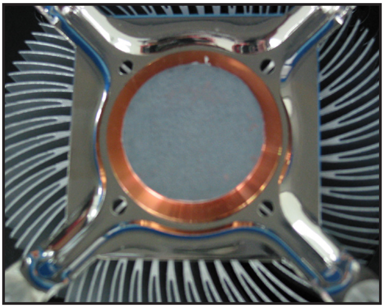
1. Odaberite Intel-ceritifikovan ili AMD-certifikovan sklop rashladnog profila i ventilatora koji se nalazi na vašoj matičnoj ploči. Postoje konektori za ventilator sa 3-čiode (levo) i 4-čiode (desno). Samo ventilatori procesora sa 4-čiode podržavaju ASUS Q-Fan tehnologiju.





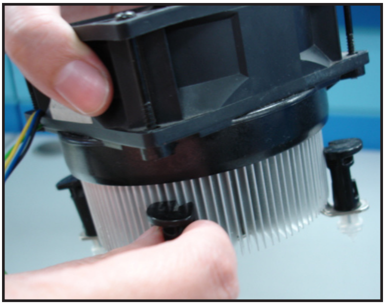
Za Intel®-certifikovan rashladni profil:

2. Neke rashladne profile dobićete sa već primenjenom termalnom pastom. U tom slučaju, nemojte da je skidate i zaštitnu foliju uklonite tek pred instalaciju. Ukoliko termalne paste nema, primenite nekoliko kapi termalne paste na izloženo područje procesora sa kojim će rashladni profil doći u dodir. Proverite da je raširena u ravnomernom, tankom sloju.

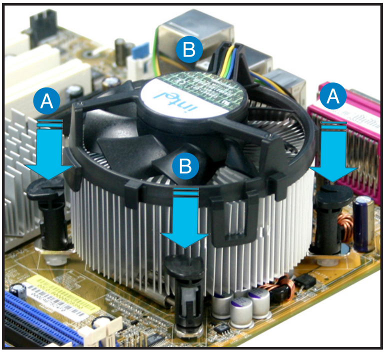


Da bi sprečili zagađivanje paste, NE širite pastu direktno prstom.

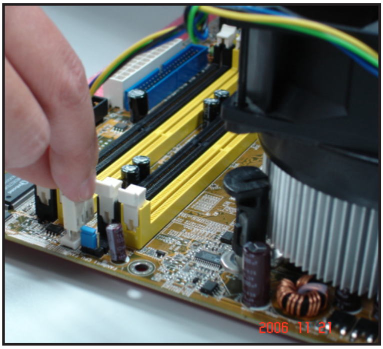
3. Svaki pričvršćivač okrenite tako da je uži kraj žleba okrenut ka spolja.



4. Gurnite naniže po dva pričvršćivača po dijagonali kako bi pričvrstili sklop rashladnog profila i ventilatora na mesto.



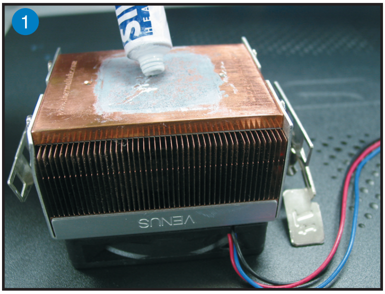
5. Povežite kabl za ventilator procesora za odgovarajući konektor na matičnoj ploči.

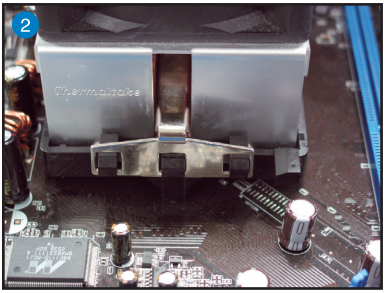


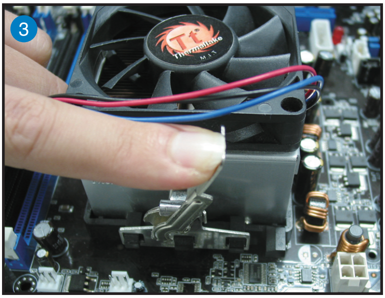
NE ZABORAVITE da povežete konektor ventilatora procesora! Do grešaka u nadgledanju hardvera može da dođe ukoliko ne uspete da povežete ovaj konektor i predlažemo da upotrebite kružni rashladni profil kako bi dobili maksimalno područje rasipanja toplote.

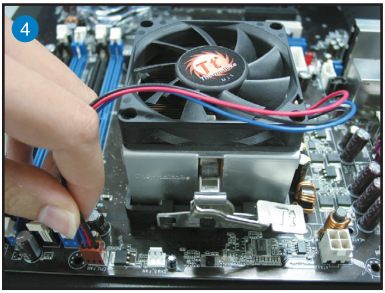
Za AMD-certifikovan rashladni profil:

Pratite uputstva ispod da bi instalirali AMD-certifikovan rashladni profil.







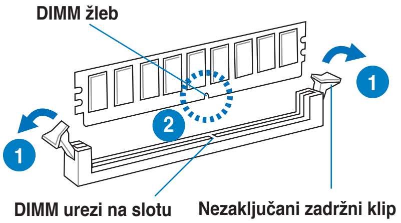


1.3 Instaliranje DIMM-a

Proverite da ste isključili napajanje pre nego što dodate ili uklonite DIMM ili druge sistemske komponente. Ukoliko to ne uradite, može da dođe do ozbiljnog oštećenja matične ploče i komponenti.

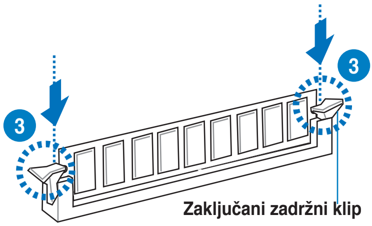
Instaliranje DIMM-a, na DIMM čašici sa duplim klipom

1. Otključajte DIMM podnožje pritiskom na zadržne klipove spolja.
2. Poravnajte DIMM u slotu tako da se žleb na DIMM memoriji poklapa sa urezima na prorezu za DIMM memoriju u slotu..



DIMM ima žleb koji će upasti samo u jednom smeru.NEMOJTE silom da gurate DIMM memoriju u prorez ukoliko je okrenuta u pogrešnom smeru, jer možete da oštetite DIMM memoriju.

3. Držite DIMM memoriju za oba kraja i potom ubacite DIMM vertikalno u prorez. Pritisnite malo jače na oba kraja DIMM memorije simultano dok zadržavajuće spojnice ne kliknu nazad na mesto i DIMM memorija je u potpunosti ubačena kako biste obezbedili da DIMM memorija pravilno ulegne.

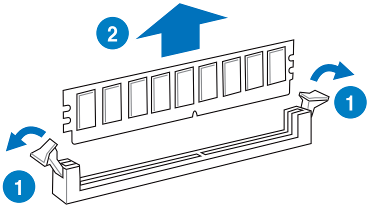


Uvek ubacite DIMM u prorez VERTIKALNO kako biste sprečili oštećivanje žleba na DIMM memoriji.

- Da biste instalirali dva ili više DIMM-a, pogledajte uputstvo za korišćenje koje ste dobili sa matičnom pločom.
- Pogledajte uputstvo za korišćenje za spisak kvalifikovanih prodavaca memorijskih modula.

Uklanjanje DIMM memorije iz proreza za DIMM sa duplim zadržavajućim spojnicama

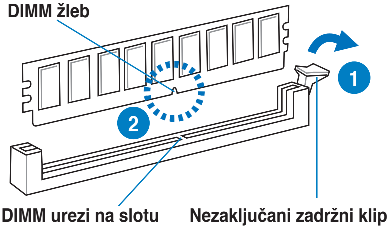
1. Simultano pritisnite zadržavajuće spojnice prema spolja da oslobodite DIMM.
2. Izvucite DIMM iz proreza.



Držite DIMM lagano prstima kada pritiskate zadržavajuće spojnice. DIMM može da se ošteti kada izleti sa dodatnom snagom.

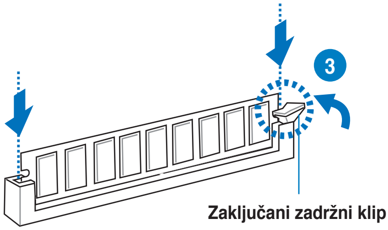
Instaliranje DIMM-a, na DIMM čašici sa duplim klipom

1. Otključajte DIMM podnožje pritiskom na zadržne klipove spolja.
2. Poravnajte DIMM u slotu tako da se žleb na DIMM memoriji poklapa sa urezima na prorezu za DIMM memoriju u slotu..



DIMM ima žleb koji će upasti samo u jednom smeru.NEMOJTE silom da gurate DIMM memoriju u prorez ukoliko je okrenuta u pogrešnom smeru, jer možete da oštetite DIMM memoriju.

3. Držite DIMM memoriju za oba kraja i potom ubacite DIMM vertikalno u prorez. Pritisnite malo jače na oba kraja DIMM memorije simultano dok zadržavajuće spojnice ne kliknu nazad na mesto i DIMM memorija je u potpunosti ubačena kako biste obezbedili da DIMM memorija pravilno ulegne.

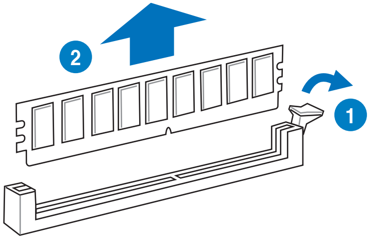


Uvek ubacite DIMM u prorez VERTIKALNO kako biste sprečili oštećivanje žleba na DIMM memoriji.

- Da biste instalirali dva ili više DIMM-a, pogledajte uputstvo za korišćenje koje ste dobili sa matičnom pločom.
- Pogledajte uputstvo za korišćenje za spisak kvalifikovanih prodavaca memorijskih modula.

Uklanjanje DIMM memorije iz DIMM proreza sa jednom zadržavajućom spojnicom

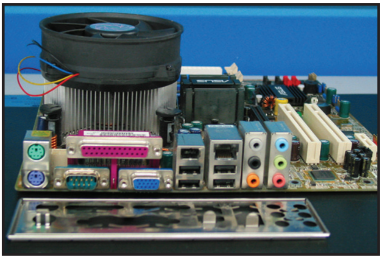
1. Pritisnite zadržavajuću spojnicu ka spolja da oslobodite DIMM.
2. Izvucite DIMM iz proreza..



Držite DIMM lagano prstima kada pritiskate zadržavajuće spojnice. DIMM može da se ošteti kada izleti sa dodatnom snagom.

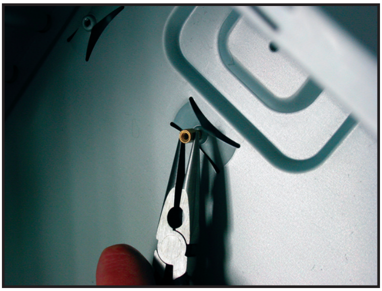
1.4 Instaliranje matične ploče

1. I/O portovi se razlikuju kod matičnih ploča. Upotrebite i instalirajte zadnji I/O štit koji dobijate samo u paketu sa matičnom pločom.

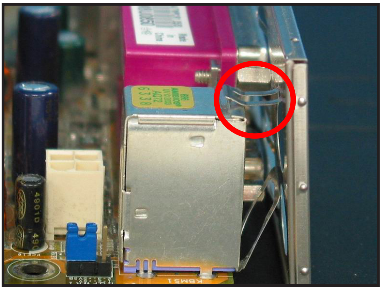


Neke od oštrih ivica i uglova mogu dovesti do telesne povrede. Predlažemo da navučete rukavice otporne na ubode ili posekotine pre instaliranja matične ploče i I/O štita.

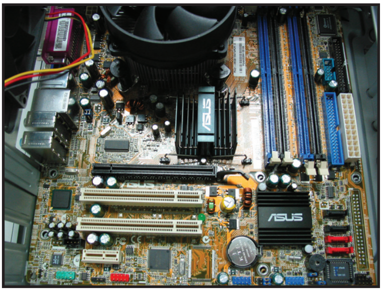
2. Instalirajte šrafove za razdvajanje u odgovarajuće rupe za šrafove na metalnoj ploči.



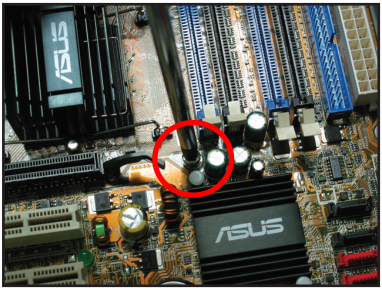
3. Opruge ivice I/O štita mogu da oštete I/O portove. Budite oprezni kada instalirate I/O štit.



4. Postavite I/O stranu matične ploče ka zadnjoj strani kućišta i stavite matičnu ploču u kućište.



5. Ubacite i blago pričvrstite svaki šraf prvo po dijagonali. Nakon što su svi šrafovi ubačeni, zašrafite šrafove tako da su pritegnuti do jačine kojom možete da pritegnete prstima.



- Možete da uklonite poklopce metalnih proreza za dodatne kartice na poleđini kućišta pre instaliranja matične ploče. Kod nekih modela kućišta, može biti komplikovano ukloniti poklopce metalnih proreza nakon instalacije.
- NEMOJTE da suviše čvrsto pritegnete šrafove. Ukoliko to uradite, možete da oštetite matičnu ploču.

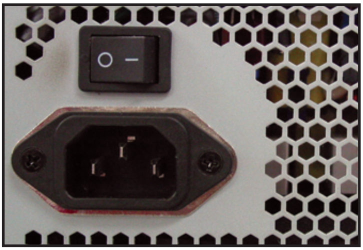
1.5 Instaliranje napajanja

Postoje dve vrste napajanja koja se obično koriste. Jedno je sa Active Power Factor Correction – Aktivnom korekcijom faktora snage (PFC) a drugo je sa pasivnim PFC-om.

1. Odaberite napajanje.

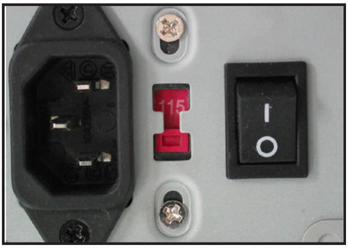
Napajanje sa pasivnim PFC-om:

Pasivni PFC zahteva da korisnik ručno podesi ulazni napon naizmenične struje.



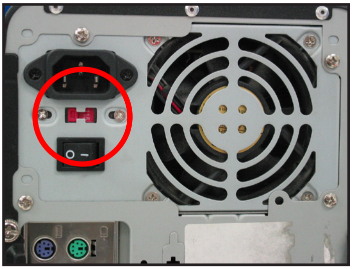
Napajanje sa aktivnim PFC-om:

Aktivni PFC automatski ispravlja ulazni napon naizmenične struje.



2. Ukoliko koristite napajanje sa pasivnim PFC-om, podesite korektan napon naizmenične struje za vaše područje.

Ukoliko ne podesite napajanje na korektnu jačinu napona naizmenične struje, sistem će biti ozbiljno oštećen.



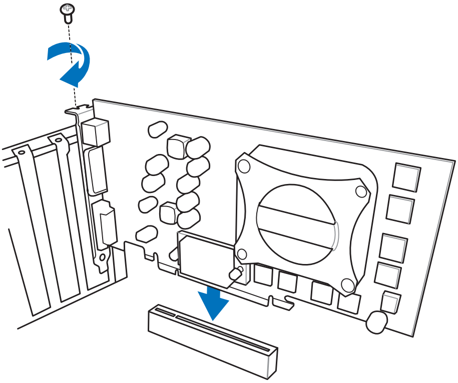
Koristite isključivo napajanja sa bezbednosnim sertifikatom. Korišćenje nestabilnog napajanja može da ošteti vašu matičnu ploču i druge delove. Pogledajte uputstvo za korišćenje napajanja koja ispunjavaju zahteve matične ploče.

1.6 Instaliranje dodatnih kartica

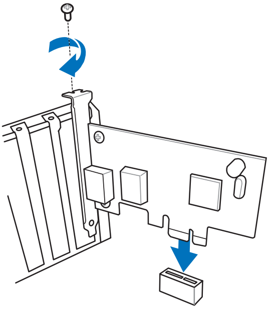
Da bi instalirali dodatnu karticu:

1. Uklonite poklopac metalnog proreza pored žleba na kome planirate da instalirate dodatnu karticu.
2. Instalirajte dodatnu karticu i uverite se da je ispravno “legla” u žleb.
3. Zašrafite da bi pričvrstili karticu za žleb.
4. Ponovite prethodne korake da bi instalirali dodatne kartice.

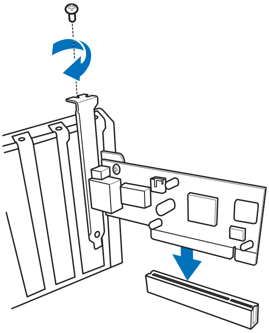
PCIE x16 kartica



PCIE x1 kartica



PCI kartica

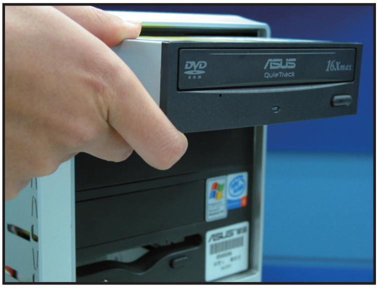


- Pogledajte dokumentaciju kartice za informacije o konfigurisanju, kao i uputstvo za korišćenje matične ploče za slučaj da treba da podesite džampere nakon instalacije kartice.
- Pogledajte uputstvo za korišćenje matične ploče za uputstva o povezivanju signalnog kabla kartice.

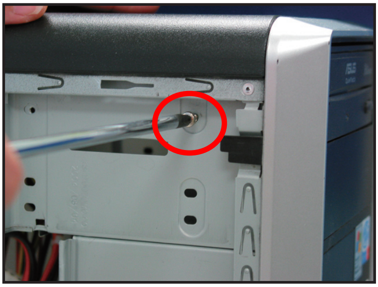
1.7 Instaliranje disk drajvova

1.7.1 PATA optički disk drajv

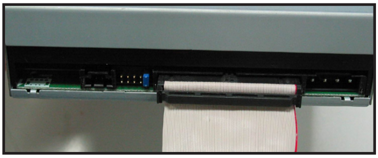
1. Uklonite lažni poklopac i gurnite optički disk drajv u prostor na kućištu.



2. Poravnajte rupice za šrafove i pričvrstite disk drajv šrafovima.

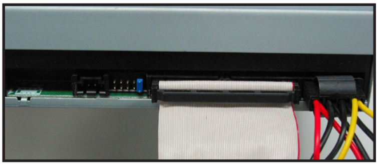


3. Poravnajte i priključite IDE kabl u optički drajv. Crvena traka na IDE kablu je kraj na kome je čioda1 i treba da se poklopi sa udubljenjem sa oznakom Pin1 (čioda1) na optičkom drajvu.

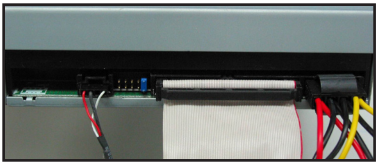


IDE kablovi ne mogu se povezati na pogrešan način. Nikada na silu ne gurajte IDE kabl u konektor.

4. Povežite kabl za struju sa 4-čiode za optički drajv.



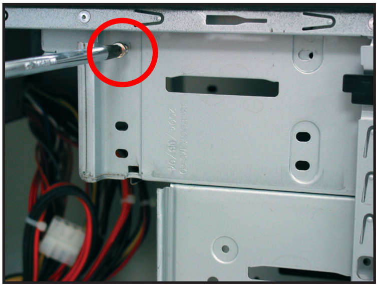
5. Priključite audio kabl za konektor na optičkom drajvu.



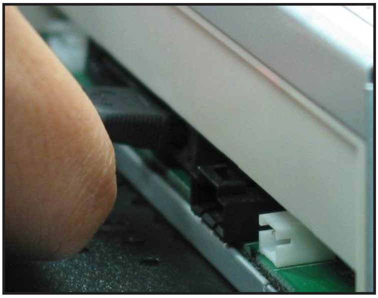
1.7.2 SATA optički disk drajv

1. Uklonite lažni poklopac i gurnite optički disk drajv u prostor na kućištu.

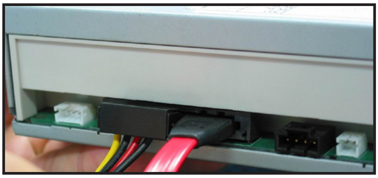
2. Poravnajte rupice za šrafove i pričvrstite disk drajv šrafovima.



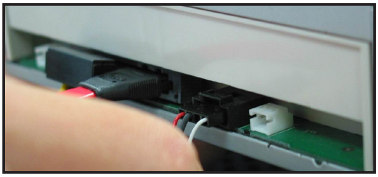
3. Poravnajte i priključite SATA kabl u optički drajv. SATA kablovi ne mogu se povezati na pogrešan način. Nikada na silu ne gurajte SATA kabl u konektor.



4. Povežite kabl za struju sa 4-čiode za optički drajv.

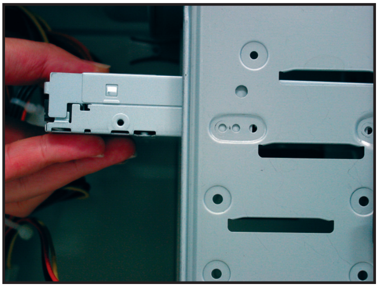


5. Priključite audio kabl za konektor na optičkom drajvu.

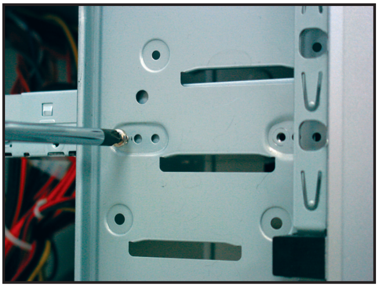


1.7.3 Flopi disk drajv

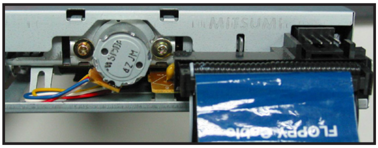
1. Uklonite lažni poklopac i gurnite flopi disk drajv u prostor na kućištu.



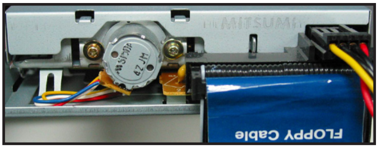
2. Poravnajte rupice za šrafove i pričvrstite disk drajv šrafovima.



3. Poravnajte i priključite kabl za povezivanje flopi diska u flopi disk drajv. Crvena traka na kablu je kraj na kome je čioda1 i treba da se poklopi sa oznakom pin1 (čioda1) na flopi disk drajvu.

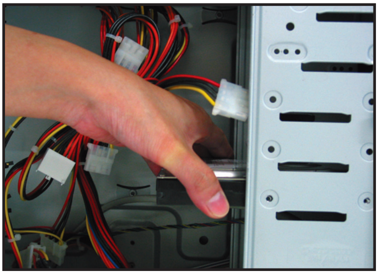


4. Povežite kabl za struju flopi diska za konektor na poleđini flopi disk drajva.

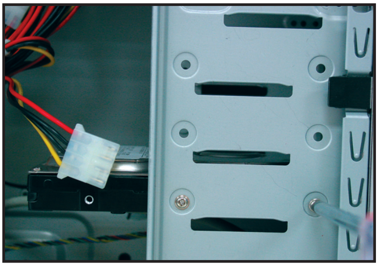


1.7.4 PATA hard disk drajv

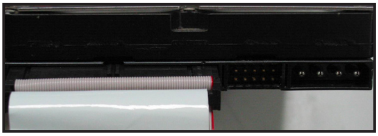
1. Ubacite PATA hard disk drajv u prostor na kućištu.



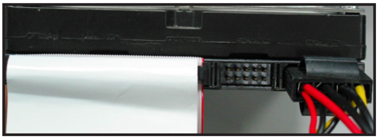
2. Poravnajte rupice za šrafove i pričvrstite disk drajv šrafovima.



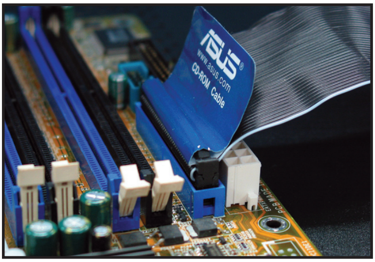
3. Poravnajte i priključite signalni kabl za hard disk drajv. Crvena traka na kablu je kraj na kome je čioda1. Uklopite sa žlebom koji sprečava pogrešno povezivanje i ne gurajte kabl silom u konektor.



4. Povežite kabl za struju sa 4-čiode za konektor na poleđini hard disk drajva.

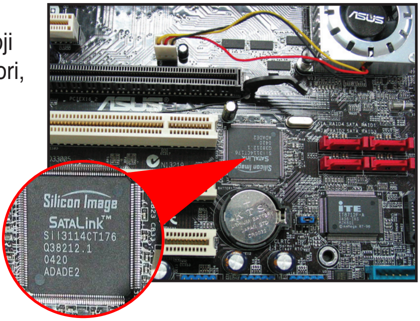


5. Priključite drugi kraj signalnog kabla za odgovarajući prorez (slot) na matičnoj ploči.



Beleške za instaliranje PATA hard disk drajva

- Ukoliko je vaš operativni sistem instaliran na hard disk drajvu koji kontrolišu RAID ili drugi kontrolori, morate na hard disk prvo da instalirate drajver za kontroler.


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

- Konektorski kabl je kodiran bojom. Plava boja je za osnovni konektor, a crni-sivi je za primarni-sekundarni disk drajv.

ASUS
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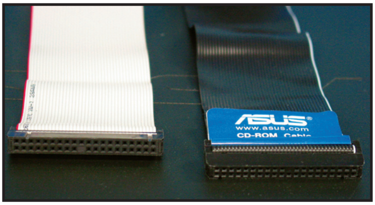
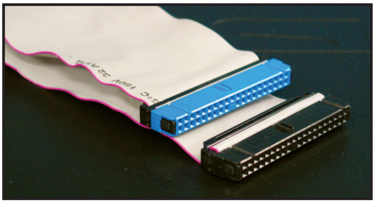
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

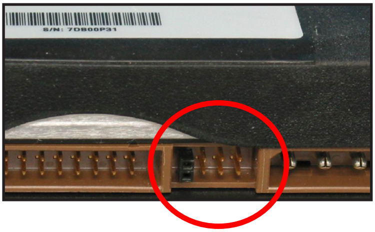
- Postoje dva kabla za ATA IDE disk drajvove, noviji sa 80-žica (desno) i stariji sa 40-žica (levo). Za ATA66-100-133 disk drajvove, samo kabl sa 80-žica može da ponudi bolje performanse. Kablovi sa 40-žica se uglavnom koriste za optičke drajvove.



- Kablovi su dizajnirani sa priključcima koje se uvlače/izvlače. Jednostavno instalirajte disk drajvove na osnovu etiketa na kablovima. Da bi sprečili oštećenje čioda, isključite kabl povlačenjem priključaka za kabl.

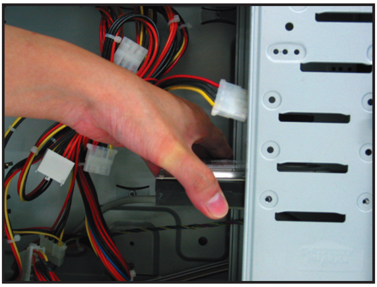


- Kada povezujete dva IDE uređaja, morate da podesite džampere na različite položaje, jedan kao master (glavni) i drugi kao slave (sekundarni). Ukoliko koristite kabl sa 80-žica, možete da upotrebite stil biranja kablova.

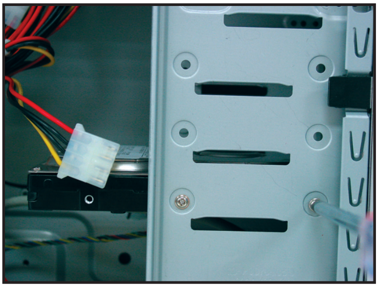

S/N: 7DB00P31

1.7.5 SATA hard disk drajv

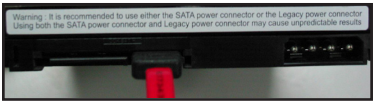
1. Ubacite SATA hard disk drajv u prostor na kućištu.



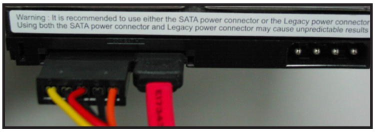
2. Poravnajte rupice za šrafove i pričvrstite disk drajv šrafovima.



3. Poravnajte i priključite SATA kabl za hard disk drajv. Kabl se može ubaciti samo na jedan način.

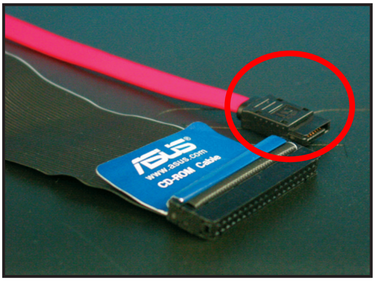

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Povežite SATA kabl za struju za konektor na poleđini hard disk drajva.

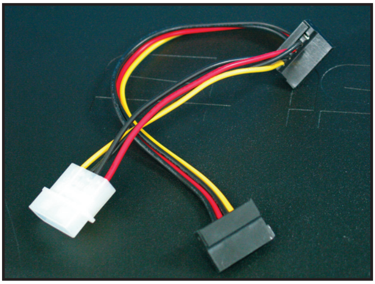

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Beleške za instaliranje SATA hard disk drajva

- Serijski ATA (SATA) interfejs obezbeđuje veću brzinu prenosa podataka i bolje tolerisanje napona. Uski dizajn SATA kabla takođe rešava probleme sa kablovima i dozvoljava bolji protok vazduha u kućištu.

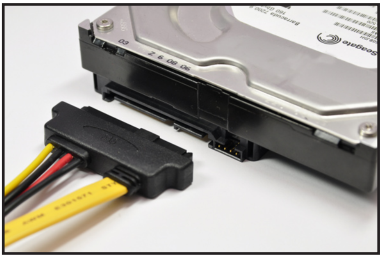

ASUS
www.asus.com
CD-ROM Cable

- Konektor SATA kabla za struju razlikuje se od tradicionalnog konektora za struju sa 4-čiode. ASUS matična ploča daje skup kablova adaptera za struju za slučaj da vaša jedinica napajanja ne sadrži ovaj novi konektor.

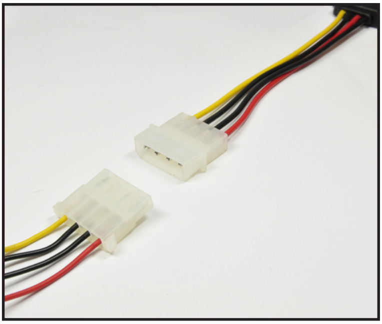


1.7.6 SAS hard disk drajv

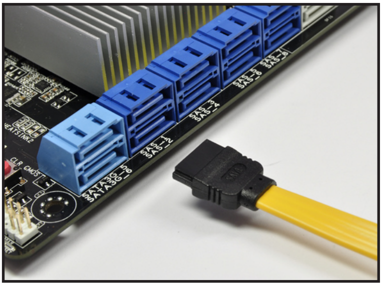
1. Okrenite i povežite kabl za SAS signal / kombinaciju za napajanje za hard disk drajv. Kabl se može ubaciti samo na jedan način.



2. Povežite SAS kabl za napajanje za priključak za napajanje na napajanju.



3. Povežite SAS signalni kabl za SAS konektor na matičnoj ploči.

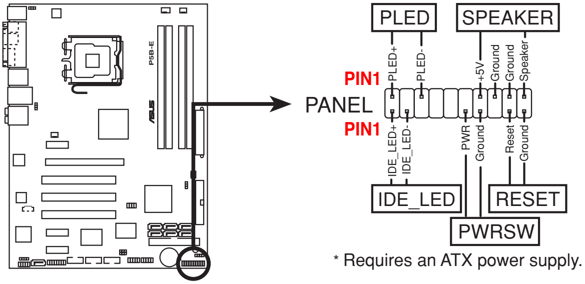

SATA3G_5
SATA3G_6
SAS_1
SAS_2
SAS_3
SAS_4
SAS_5
SAS_6
SAS_7
SAS_8
CLR_CMOS

1.8 Kablovi prednjeg panela

Da bi povezali kablove prednjeg panela:

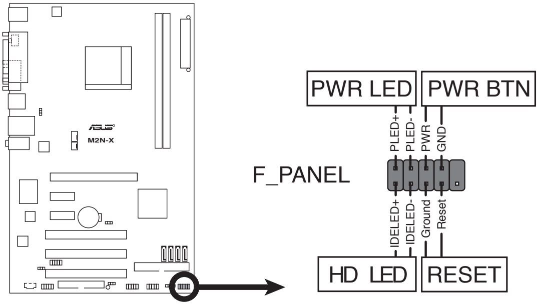
- RESET (prekidač za resetovanje)
- PLED (svetleća dioda za struju)
- PWRSW (prekidač za uključivanje)
- IDE_LED (IDE Hard Disk Aktivna LED)
- ZVUČNICI (konektor za zvučnike)

20-8 čioda – konektor prednjeg panela


P5B-E
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

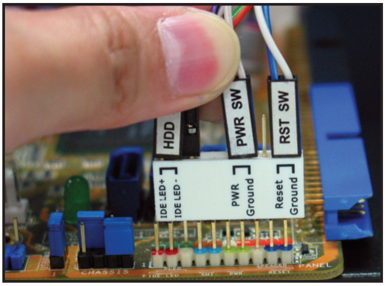
10-1 čioda – konektor prednjeg panela


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Kablovi prednjeg panela vašeg kućišta mogu se razlikovati zavisno od modela ili dizajna. Povežite ove konektore za matičnu ploču na osnovu etiketa.
- Ukoliko se svetleće diode ne upale a položaj čioda je ispravan, možda ste zamenili čiode za uzemljenje sa signalnim čiodama. Obično bela žica stoji za čiode sa uzemljenjem a žica kodirana bojom za signalne čiode.
- Kablovi prednjeg panela za ZVUČNIKE, RESETOVANJE i PWRSW nemaju određen način postavljanja (orjentaciju), dok IDE_LED i PLED kablovi imaju. Povežite kabl PIN1 za konektor PIN1 na matičnoj ploči.
- Konektor prednjeg panela razlikuje se kod različitih modela matičnih ploči, pogledajte Uputstvo za korišćenje za više informacija.

ASUS Q-Connector

Instalacija u jednom koraku za ASUS Q-Connector štedi vreme i sprečava da se borite sa neorganizovanim kablovima prednjeg panela. Pogledajte Uputstvo za korišćenje za više detalja.

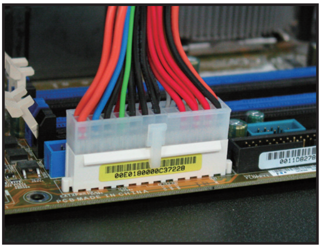


Q-Connector dostupan je kod odabranih modela. Pogledajte Uputstvo za korišćenje za više detalja.

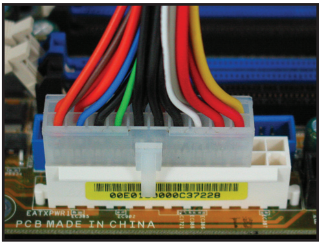
1.9 Povezivanje ATX napajanja

ATX konektori za struju mogu se ubaciti samo na jedan način. Upotrebite klipove sa strane da bi povezali konektore za matičnu ploču. NEMOJTE da na silu ubacujete “muške” konektore za struju u “ženske” duplikate na matičnoj ploči. Obično će biti dva konektora na matičnoj ploči, konektori za struju (napajanje) od 24-čiode i 4-čiode. Neka starija napajanja možda će imati samo konektore za struju sa samo 20-čioda, koji takođe mogu da se ubace u konektore za struju od 24-čiode na matičnoj ploči.

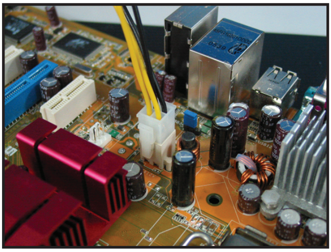
Konektori za struju od 24-čioda



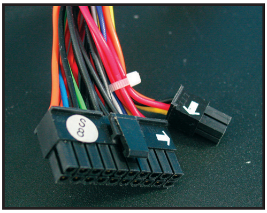
Konektori za struju od 20-čioda
(na „ženskom“ duplikatu sa 24-čiode)

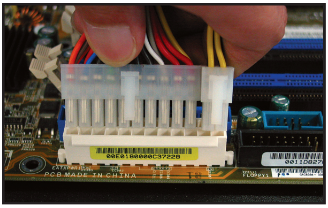


Konektori za struju od 4-čioda



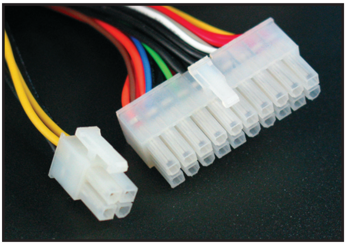
- NEMOJTE da priključujete spoljašnji adapter za naizmeničnu struju kada povezujete konektore za struju sa matičnom pločom.
- Proverite da su konektori za struju čvrsto povezani za matičnu ploču.
- Ukoliko vaše napajanje podržava 20-čiode+4-čiode, možete da ukombinujete ova dva konektora i da instalirate konektore sa 24 čioda na matičnoj ploči.



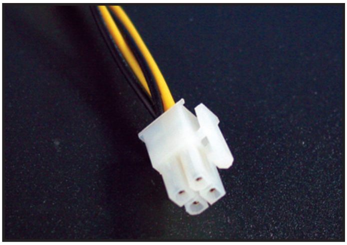


Konektori za struju

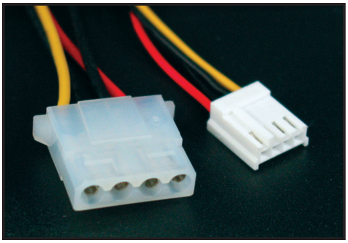
20+4 (24) čioda ATX konektor



ATX konektori za struju od 4-čioda

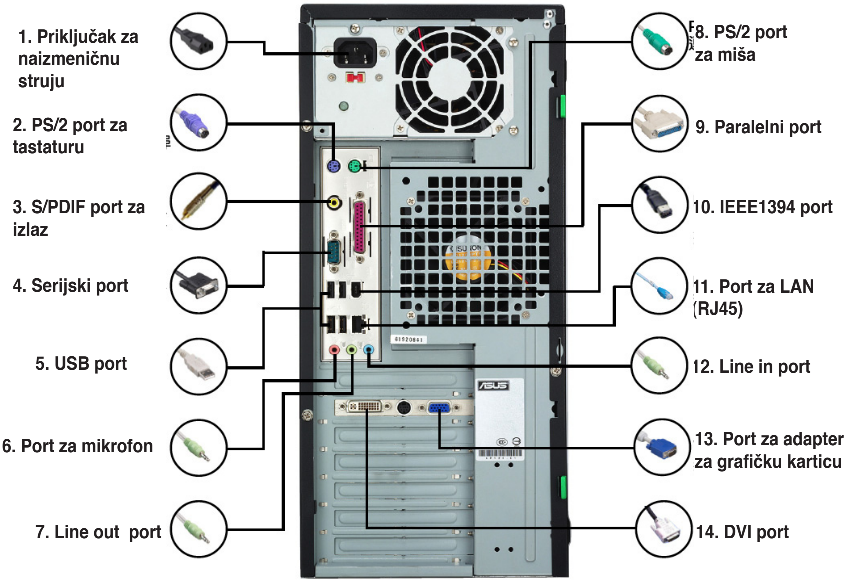


Periferni konektor za struju (levo)
Konektor za struju za flopi (desno)



1.10 Periferni uređaji i dodaci

Pogledajte sliku ispod da bi videli kako da povežete periferne uređaje i dodatke.


1. Priključak za naizmeničnu struju
2. PS/2 port za tastaturu
3. S/PDIF port za izlaz
4. Serijski port
5. USB port
6. Port za mikrofon
7. Line out port
8. PS/2 port za miša
9. Paralelni port
10. IEEE1394 port
11. Port za LAN (RJ45)
12. Line in port
13. Port za adapter za grafičku karticu
14. DVI port

1. Priključak za naizmeničnu struju + produžni kabal za struju

2. PS/2 port za tastaturu + tastatura

3. S/PDIF izlazni port + digitalni 5.1 zvučni sistem

4. Serijski port + PDA dok

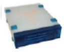
5. USB port + USB uređaji

6. Port za mikrofon + mikrofon

7. Line out port + zvučnik

8. PS/2 port za miša + miš

9. Paralelni port + printer

10. IEEE1394 port + drajv za eksterni hard disk

11. LAN (RJ45) port + modem

12. Line in port + aparat za snimanje

13. VGA port + CRT monitor

14. DVI port + LCD monitor

Konektori zadnjeg panela razlikuju se od modela do modela. Pogledajte Uputstvo za korišćenje za više detalja.

1.11 Kada počinjete rad po prvi put

Sistem pokreće power-on self tests (samo-testiranje sa uključenim uređajem) ili POST Dok se testiranje odvija, čućete BIOS bipove (pogledajte tabelu sa BIOS bip kodovima ispod)

BIOS bip	Opis
Jedan duži bip zvuk koga prate tri kratka bipa	VGA nije detektovan
Jedan duži bip zvuk koga prate dva kraća bipa a potom sledi pauza (ponavlja se)	Memorija nije detektovana
Jedan duži bip zvuk koga prate četiri kratka bipa	Hardverska komponenta ne funkcioniše (AMI BIOS)
Četiri kratka bipa	Hardverska komponenta ne funkcioniše (AWARD BIOS)

Rešavanje problema

Problem	Rešenje
• Ne mogu da uključim kompjuter • Svetleća dioda za struju nije upaljena. • Ventilator napajanja ne radi.	Uverite se da je kabl za struju dobro povezan.
Kompjuter je uključen ali monitor ima crnu sliku.	• Uverite se da je monitor uključen i da je VGA kabl ispravno povezan. • Podesite osvetljenje i kontrast monitora. • Isključite kompjuter i izvucite kabl za struju. Proverite da li je VGA kartica čvrsto instalirana.
Memorija nije detektovana	• Proverite da je memorijski modul ispravan • Uverite se da su DIMM memorije čvrsto gurnute u DIMM žleb. • Uverite se da je memorijski modul sa spiska kvalifikovanih prodavaca. Pogledajte Uputstvo za korišćenje za QVL.
Flopi greška (indikator je uvek upaljen ili se poruka upozorenja pojavljuje na ekranu.)	• Proverite BIOS konfiguraciju vezano za flopi disk drajv. • Uverite se da su kablovi za flopi disk drajv ispravno priključeni.
Greška hard/optičkog diska (nije prepoznat ili detektovan)	• Proverite da je podešavanje džampera (mostića) ispravno. (Master (glavni)/Slave (sekundarni)) • Proverite BIOS konfiguraciju za hard/optički disk drajv. • Uverite se da su uređaji kablova čvrsto priključeni. • Uverite se da su drajveri uređaja instalirani.

Poglavlje 2: Podesite/ažurirajte BIOS

2.1 AFUDOS pomoćni program

AFUDOS pomoćni program dozvoljava vam da ažurirate BIOS fajl u DOS okruženju korišćenjem flopi diskete sa koje se podiže sistem (boot diskete) sa ažuriranim BIOS fajlom. Ovaj pomoćni program takođe vam omogućava da kopirate trenutni BIOS fajl koji možete da koristite kao rezervnu kopiju kada BIOS ne uspe da se podigne ili bude koruptovan tokom procesa ažuriranja.

Kopiranje trenutnog BIOS-a

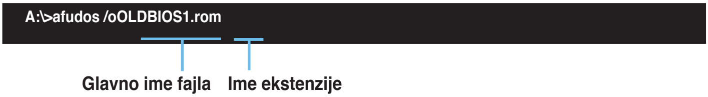
Da bi iskopirali trenutni BIOS korišćenjem AFUDOS pomoćnog programa:

- Proverite da flopi disk nije zaštićen od pisanja i ima najmanje 1024KB slobodnog prostora kako biste snimili fajl.
- Sledeći BIOS ekrani služe samo za primer. Ono što ćete vi videti na BIOS ekranu će se možda razlikovati od prikazanog.

1. Iskopirajte AFUDOS pomoćni program (afudos.exe) sa DVD-ja za podršku matičnoj ploči na flopi disk sa koga se podiže sistem (boot disketa) koji ste ranije kreirali.
2. Podignite sistem (boot) u DOS režimu, a potom kada ste upitani otkucajte:

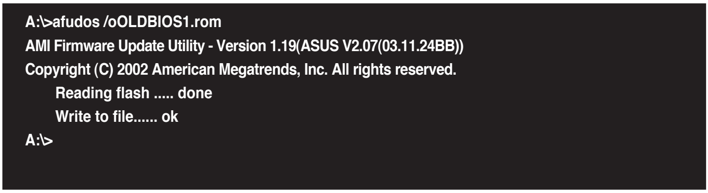
   afudos /o[filename]

   gde je [filename] bilo koje korisnički dodeljeno ime koje nema više od osam alfanumeričkih karaktera za glavno ime fajla i tri alfanumerička karaktera za ime ekstenzije.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Pritisnite <Enter>. Pomoćni program kopira trenutni BIOS fajl na flopi disk.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

   Pomoćni program vraća se DOS promptu nakon kopiranja trenutnog BIOS fajla.

Ažuriranje BIOS fajla

Da bi ažurirali trenutni BIOS korišćenjem AFUDOS pomoćnog programa:

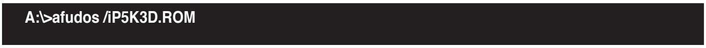
1. Posetite internet prezentaciju ASUS-a (www.asus.com) i preuzmite najnoviji BIOS fajl za matičnu ploču. Snimite BIOS fajl na flopi disk za podizanje sistema (boot disketu).

Zapišite BIOS ime fajla na parčetu papira. Treba da otkucate tačno ime BIOS fajla u DOS promptu.

2. Iskopirajte AFUDOS pomoćni program (afudos.exe) sa DVD-ja za podršku matičnoj ploči na flopi disk sa koga se podiže sistem (boot disketa) koji ste ranije kreirali.
3. Podignite sistem (boot) u DOS režimu, a potom kada ste upitani otkucajte:

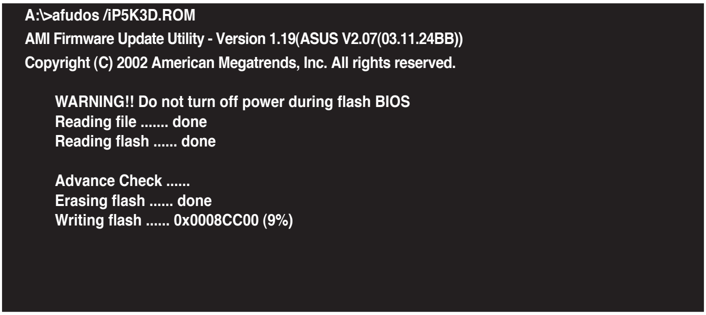
   afudos /i[filename]

   gde je [filename] najnoviji ili originalni BIOS fajl na flopi disku za podizanje sistema (boot disketi).



```
A:\>afudos /iP5K3D.ROM
```

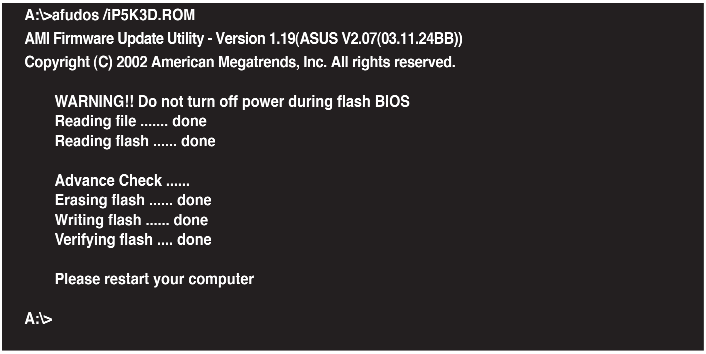
4. Pomoćni program verifikuje fajl i počinje da ažurira BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Zapišite BIOS ime fajla na parčetu papira. Treba da otkucate tačno ime BIOS fajla u DOS promptu.

5. Pomoćni program vraća se u DOS prompt nakon što je proces ažuriranja BIOS-a završen. Restartujte sistem sa hard disk drajva.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Pomoćni program AwardBIOS Flash Utility

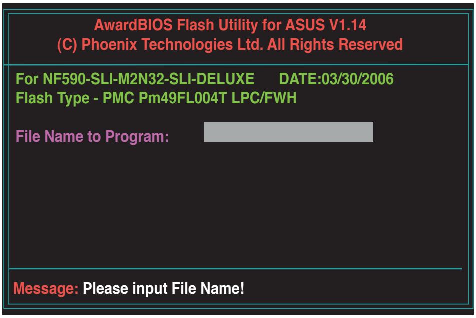
Ažuriranje BIOS

Bazični input/output sistem (BIOS) može se ažurirati korišćenjem pomoćnog programa AwardBIOS Flash Utility. Pratite ova uputstva da bi ažurirali BIOS koristeći ovaj pomoćni program.

1. Preuzmite najnoviji BIOS fajl sa ASUS-ove internet prezentacije. Promenite ime fajla u M2N32SLI.BIN i snimite ga na flopi disk, CD ROM ili USB fleš disk u **FAT 16/12 formatu.**

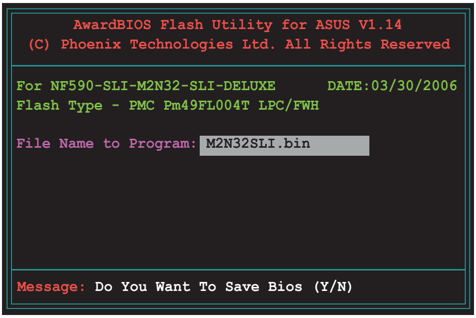
Snimite ažuriran BIOS fajl na disk da bi izbegli da učitate pogrešan BIOS fajl.

2. Iskopirajte pomoćni program AwardBIOS Flash Utility (awdflash.exe) iz foldera sa softverom sa pomoćnog CD-a na flopi disk, CD ROM ili USB fleš disk sa najnovijim BIOS fajlom.
3. Pokrenite sistem iz DOS režima korišćenjem flopi diska za pokretanje sistema (boot diskete) ili USB fleš diska koji ste kreirali ranije.
4. U DOS režimu, upotrebite <X:> (X stoji za ime dodele diska) da bi prešli na folder ili flopi disk, CD ROM ili USB fleš disk na koji ste snimili BIOS fajl i pomoćni program AwardBIOS Flash Utility.
5. Kada budete upitani, otkucajte awdflash i potom pritisnite <Enter>. Pojaviće se prozor pomoćnog programa AwardBIOS Flash Utility.



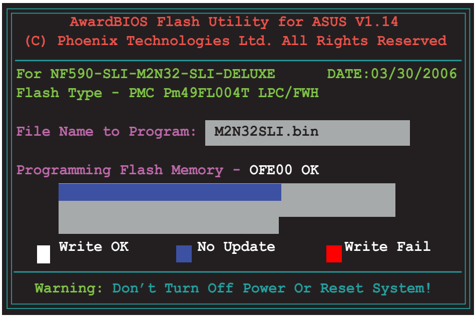
```
            AwardBIOS Flash Utility for ASUS V1.14
      (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

6. Otkucajte ime BIOS fajla pod File Name (ime fajla) u polju za Program, potom pritisnite <Enter>.



```
        AwardBIOS Flash Utility for ASUS V1.14
   (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

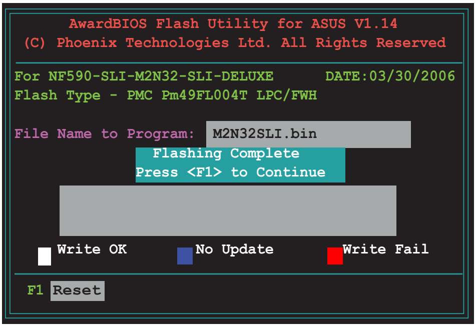
7. Pritisnite <N> kada vas pomoćni program upita da snimite trenutni BIOS fajl. Pojaviće se sledeći ekran.
8. Pomoćni program verifikuje BIOS fajl na flopi disku, CD ROM-u ili USB fleš disku i počinje da prebacuje BIOS fajl.



```
        AwardBIOS Flash Utility for ASUS V1.14
   (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ☐ Write OK       🟦 No Update       🟥 Write Fail

  Warning: Don't Turn Off Power Or Reset System!
```

NEMOJTE da isključite i restartujete sistem tokom ovog procesa prebacivanja!

9. Pomoćni program prikazuje poruku Flashing Complete (prebacivanje završeno), pokazujući da ste uspešno prebacili BIOS fajl. Uklonite disk i pritisnite <F1> da bi restartovali sistem.



```
        AwardBIOS Flash Utility for ASUS V1.14
   (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                 Flashing Complete
               Press <F1> to Continue

 ☐ Write OK       🟦 No Update       🟥 Write Fail

 F1 Reset
```

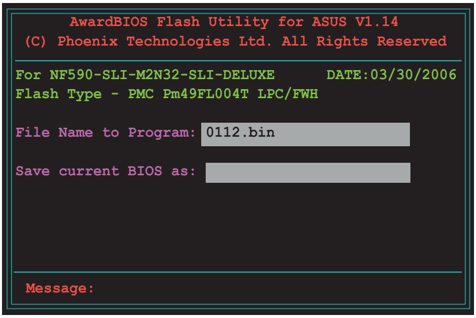
Snimanje trenutnog BIOS fajla

Možete da upotrebite pomoćni program AwardBIOS Flash Utility da bi snimili trenutni BIOS fajl. Možete da učitate trenutni BIOS fajl kada BIOS fajl postane koruptiran tokom procesa prebacivanja.

Proverite da flopi disk, CD ROM ili USB fleš disk ima dovoljno prostora da se snimi fajl.

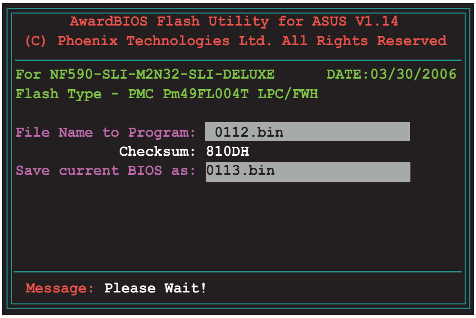
Da bi snimili trenutni BIOS fajl korišćenjem programa AwardBIOS Flash Utility:

1. Pratite korake 1 do 6 iz prethodnog odeljka.
2. Pritisnite <Y> kada vas pomoćni program upita da snimite trenutni BIOS fajl. Pojaviće se sledeći ekran.



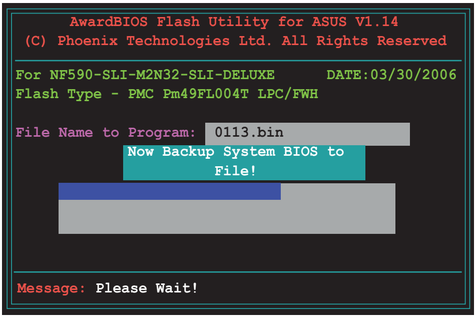
```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. Otkucajte ime fajla za trenutni BIOS fajl u polju Save current BIOS as (Snimi trenutni BIOS kao), potom pritisnite <Enter>.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. Pomoćni program snima trenutni BIOS fajl na disk, potom se vraća na proces prebacivanja BIOS-a.



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
             Now Backup System BIOS to
                       File!

Message: Please Wait!
```

2.3 ASUS-ov pomoćni program za ažuriranje

ASUS-ovo ažuriranje je pomoćni program koji vam omogućava da upravljate, snimate i ažurirate BIOS u Windows® okruženju. ASUS-ov pomoćni program za ažuriranje omogućava vam da:

- Snimite trenutni BIOS fajl
- Preuzmete najnoviji BIOS fajl sa interneta.
- Ažurirajte BIOS preko ažuriranog BIOS fajla.
- Ažurirajte BIOS direktno sa interneta i
- Pogledajte informacije o BIOS verziji.

Ovaj pomoćni program možete pronaći na pomoćnom DVD-u koji dolazi u paketu sa matičnom pločom.

ASUS-ovo ažuriranje zahteva internet konekciju bilo preko mreže ili preko internet provajdera (ISP).

Instaliranje ASUS-ovog ažuriranja

Da bi instalirali ASUS-ovo ažuriranje:

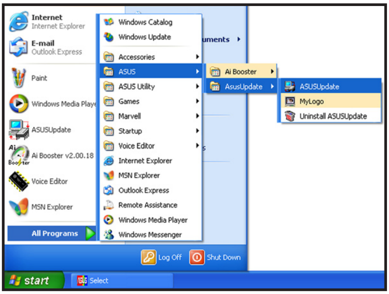
1. Smestite DVD sa podrškom u DVD optički drajv. Pojaviće se meni sa drajverima.
2. Sa **Main (glavnog)** menija, kliknite na tabelu Utilities (pomoćni programi), a potom kliknite da instalirate ASUS Update (ASUS-ovo ažuriranje) VX.XX.XX.
3. Pomoćni program za ASUS-ovo ažuriranje se kopira na vaš sistem.

Ažuriranje BIOS-a preko interneta

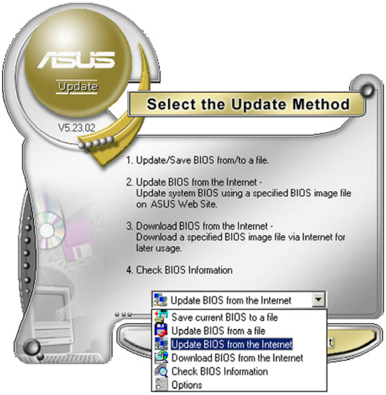
Izađite iz svih Windows® programa pre nego što ažurirate BIOS korišćenjem ovog programa.

Da bi ažurirali BIOS preko interneta:

1. Pokrenite ASUS Update utility (pomoćni program za ASUS-ovo ažuriranje) sa Windows® desktopa klikom na **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate**. Pojaviće se glavni prozor za ASUS-ovo ažuriranje.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Playe
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
uments
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

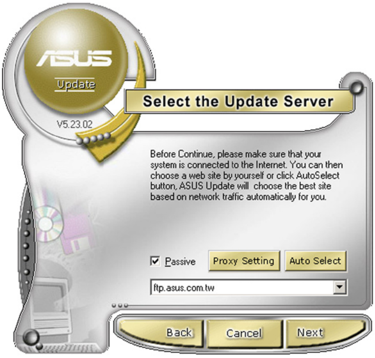
2. Odaberite **Update BIOS from the Internet** (**Ažurirajte BIOS sa interneta)** sa padajućeg menija i potom kliknite na **Next (Dalje)**.


Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Odaberite ASUS-ovu FTP lokaciju koja vam je najbliža, kako bi izbegli zagušenje internet saobraćaja, ili kliknite na **Auto Select** (automatsko odabiranje). Kliknite na **Next** (dalje).


Update
V5.23.02
Select the Update Server

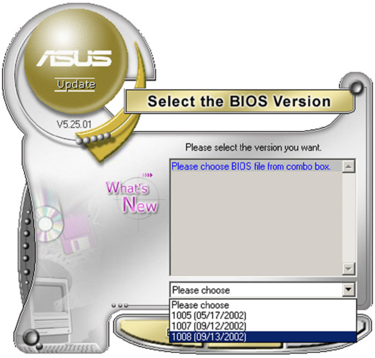
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. Sa FTP lokacije, odaberite verziju BIOS-a koju želite da preuzmete. Kliknite na **Next** (dalje).


Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

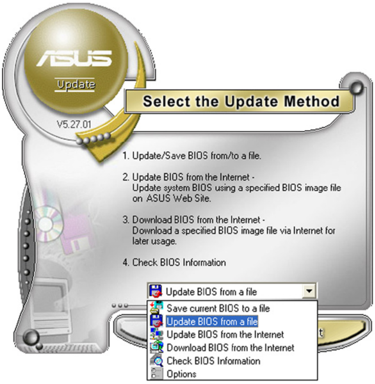
5. Pratite uputstva na ekranu da bi završili proces ažuriranja.

Pomoćni program za ASUS-ovo ažuriranje u stanju je da se samostalno ažurira preko interneta. Uvek ažurirajte pomoćni program tako da možete da koristite sve njegove karakteristike.

Ažuriranje BIOS-a preko BIOS fajla

Da bi ažurirali BIOS preko BIOS fajla:

1. Pokrenite ASUS Update utility (pomoćni program za ASUS-ovo ažuriranje) sa Windows® desktopa klikom na **Start > Programs > ASUS > ASUSUpdate > ASUSUpdate**. Pojaviće se glavni prozor za ASUS-ovo ažuriranje.
2. Odaberite **Update BIOS from a file (Ažurirajte BIOS preko fajla)** sa padajućeg menija, a potom kliknite na **Next (Dalje)**.



Select the Update Method

1. Update/Save BIOS from/to a file.

2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

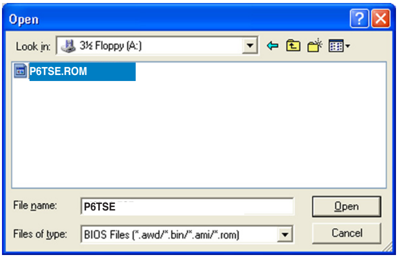
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

Update BIOS from a file

ASUS
Update
V5.27.01
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Pronađite BIOS fajl preko opcije Open windows (otvori prozor), potom kliknite na **Open** (otvori).
4. Pratite uputstva na ekranu da bi završili proces ažuriranja.



Look in: 3½ Floppy (A:)

P6TSE.ROM

File name: P6TSE

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Open
Open
Cancel

Obavezno učitajte BIOS podrazumevana podešavanja da obezbedite kompatibilnost i stabilnost sistema. Odaberite stavku **Load Setup Defaults (Učitajte podrazumevana podešavanja)** pod menijem **Exit (Izlaz)**.

2.4 ASUS BIOS ažuriranje

ASUS BIOS ažuriranje omogućava vam da ažurirate BIOS u DOS okruženju. Ovaj pomoćni program takođe vam dozvoljava da kopirate trenutni BIOS fajl koji možete da koristite kao rezervnu kopiju kada se BIOS sruši ili postane koruptovan tokom procesa ažuriranja.

Sledeći ekrani za pomoć služe samo kao referentni materijal. Pravi prikazi ekrana za pomoć možda neće biti isti kao što je prikazano.

Pre ažuriranja BIOS-a

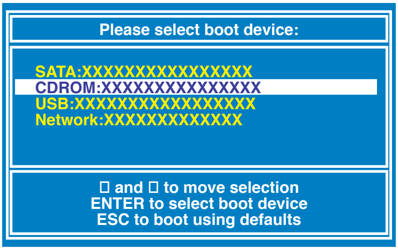
1. Pripremite DVD za podršku za matičnu ploču i USB fleš drajv u FAT32/16 formatu i na jednoj particiji.
2. Preuzmite najnoviji BIOS fajl i BIOS ažuriranje sa ASUS internet prezentacije na adresi http://support.asus.com i sačuvajte ih na USB fleš drajvu.

- NTFS nije podržan u DOS okruženju. Nemojte da sačuvate BIOS fajl i BIOS ažuriranje na hard disk drajv ili na USB fleš drajv u NTSF formatu.
- Nemojte da sačuvate BIOS fajl na flopi disk usled malog kapaciteta diska.

3. Isključite kompjuter i isključite sve SATA hard disk drajvove (opciono).

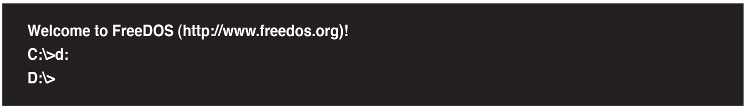
Pokretanje sistema u DOS okruženju

1. Ubacite USB fleš drajv sa najnovijim BIOS fajlom i BIOS ažuriranje u USB port.
2. Pokrenite kompjuter. Kada se ASUS Logo pojavi, pritisnite <F8> da prikažete **BIOS Boot Device Select Menu (meni za biranje uređaja za pokretanje BIOS-a)**. Ubacite DVD za podršku u optički drajv i odaberite optički drajv kao uređaj za pokretanje (boot).



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

□ and □ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Kada se pojavi meni **Make Disk (napravi disk)**, odaberite stavku **FreeDOS command prompt (slobodni DOS komandni prompt)** pritiskom na broj stavke.
4. U FreeDOS promptu, ukucajte **d:** i pritisnite <Enter> da pređete sa Drajva C (optičkog drajva) na Drajv D (USB fleš drajv).



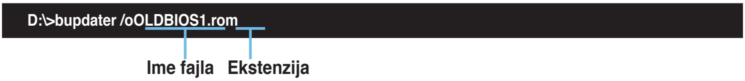
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Pravljenje rezervne kopije trenutnog BIOS-a

Da napravite rezervnu kopiju trenutnog BIOS fajla koristeći BIOS ažuriranje

Proverite da pisanje na USB fleš disku nije zaštićeno i da na njemu ima dovoljno slobodnog prostora da se sačuva fajl.

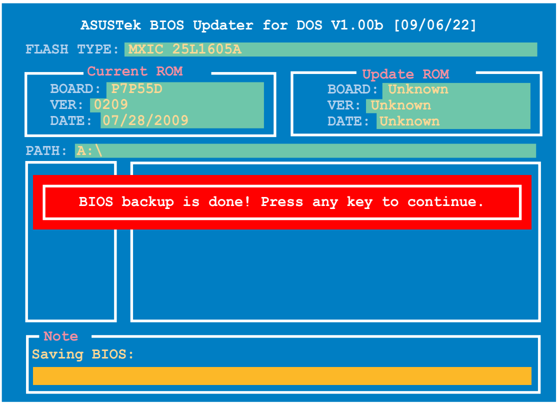
1. U FreeDOS promptu, ukucajte **bupdater /o[filename] (ime fajla)** i pritisnite <Enter>.



```
D:\>bupdater /oOLDBIOS1.rom
```

[filename] (ime fajla) je bilo koje korisnički dodeljeno ime fajla sa ne više od 8 alfanumeričkih karaktera za glavno ime fajla i tri alfanumerička karaktera za ime ekstenzije.

2. Ekran za rezervnu kopiju BIOS ažuriranja se pojavljuje ukazujući na proces BIOS kreiranje rezervne kopije. Kada je obavljeno kreiranje rezervne kopije BIOS-a, pritisnite bilo koji taster da se vratite na DOS prompt.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
       Current ROM                          Update ROM
   BOARD: P7P55D                      BOARD: Unknown
   VER: 0209                          VER: Unknown
   DATE: 07/28/2009                   DATE: Unknown
PATH: A:\

      BIOS backup is done! Press any key to continue.

  Note
 Saving BIOS:
```

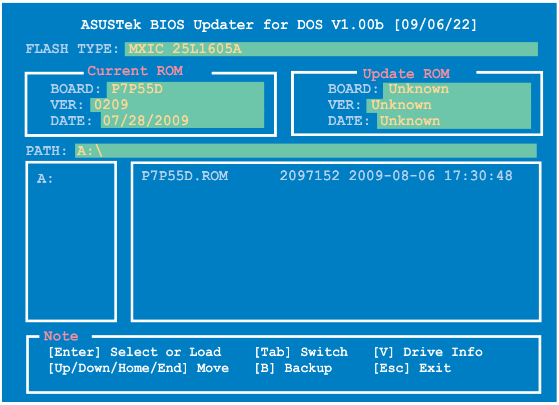
Ažuriranje BIOS fajla

Da ažurirate BIOS fajl koristeći BIOS ažuriranje

1. U FreeDOS promptu, ukucajte **bupdater /pc /g** i pritisnite <Enter>.

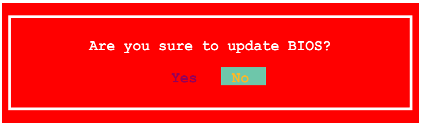
```
D:\>bupdater /pc /g
```

2. Ekran za BIOS ažuriranje se pojavljuje kao što je prikazano ispod.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
        Current ROM                         Update ROM
   BOARD: P7P55D                       BOARD: Unknown
   VER: 0209                           VER: Unknown
   DATE: 07/28/2009                    DATE: Unknown
PATH: A:\
 A:            P7P55D.ROM       2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load     [Tab] Switch     [V] Drive Info
  [Up/Down/Home/End] Move    [B] Backup       [Esc] Exit
```

3. Pritisnite <Tab> da prelazite između polja na ekranu i koristite tastere za <Gore/Dole/Home/End> da odaberete BIOS fajl i pritisnite <Enter>. BIOS ažuriranje proverava odabrani BIOS fajl i pita vas da potvrdite BIOS ažuriranje.



```
Are you sure to update BIOS?
       Yes    No
```

4. Odaberite **Yes (Da)** i pritisnite <Enter>. Kada se BIOS ažuriranje obavi, pritisnite <ESC> da izađete iz BIOS ažuriranja. Restartujte kompjuter.

NE gasite i ne resetujte sistem dok ažurirate BIOS, kako bi sprečili kvar prilikom pokretanja sistema!

- Za BIOS ažuriranje verziju 1.04 ili noviju, pomoćni program automatski izlazi iz DOS prompta nakon ažuriranja BIOS-a.
- Obavezno učitajte podrazumevana podešavanja za BIOS da biste obezbedili kompatibilnost i stabilnost sistema. Odaberite stavku **Load Setup Defaults (učitaj podrazumevana podešavanja)** pod **Exit (izlaz)** BIOS meni. Pogledajte Poglavlje 3 uputstva za korišćenje vaše matične ploče za više detalja.
- Proverite da sve povezali sve SATA hard diskove nakon ažuriranja BIOS fajla ukoliko ste ih prethodno isključili.

Poglavlje 3: Rešavanje problema

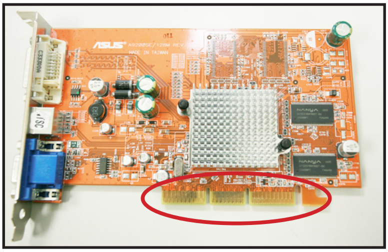
3.1 Samostalno rešavanje problema sa matičnom pločom

Nakon sastavljanja sopstvenog kompjutera, možda ćete se susresti sa problemima pokušavajući da ga uključite. Ovo poglavlje obezbeđuje odgovore na neka uobičajena pitanja o vašem PC-ju pre nego što uđete u operativni sistem. Pročitajte ovo poglavlje za pomoć u rešavanju osnovnih problema. Uštedeće vam vreme i frku oko kontaktiranja tima za tehničku podršku ASUS-a ili vraćanja proizvoda na osnovu garancije.

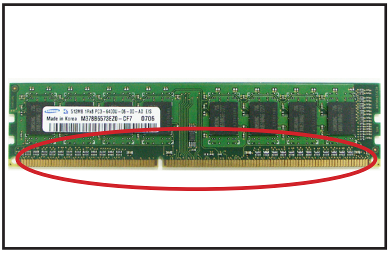
3.1.1 Osnovni problemi

O. Loše povezivanje

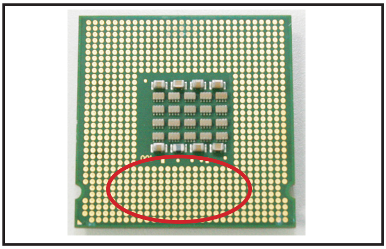
1. Proverite da nema kontaminatora na zlatnim kontaktima ili čiodama.
2. Upotrebite pamuk ili gumicu i nežno protrljajte zlatni kontakt. Ne zaboravite da obrišete ostatke od gumice.



Zlatni kontakt VGA kartice



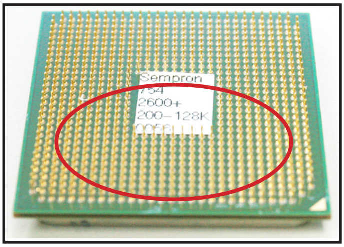
Zlatni kontakt DIMM memorije



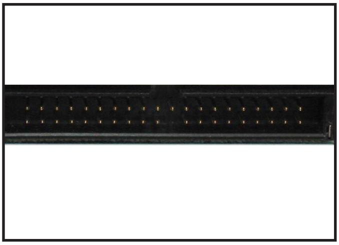
Zlatne tačke kontakta LGA775 procesora

Držite karticu ili procesor na ivici i NE DIRAJTE zlatni kontakt. Statički elektricitet će ozbiljno oštetiti uređaj u suprotom.

3. Uverite se da nema polomljenih ili savijenih čioda na vašim čiodama za konekciju ili čiodama za procesor. Polomljena i savijena čioda dovešće do kvara komponente. Kontaktirajte svog prodavca za dodatnu podršku.



Zlatne čiode ADM procesora

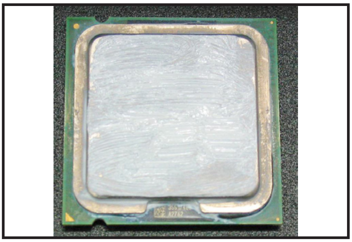


Čiode konektora

Ukoliko do lomljenja ili savijanja čiode dođe nakon kupovine, vaš prodavac vam može naplatiti cenu popravke. Ponekad polomljene ili savijene čiode NE MOGU SE POPRAVITI.

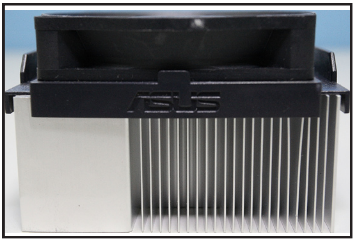
B. Pregrejan procesor

1. Obrišite površinu procesora čistom krpom. Primenite nekoliko kapi termalne paste na izloženo područje procesora sa kojim će rashladni profil biti u kontaktu. Proverite da je raširena u ravnomernom, tankom sloju.

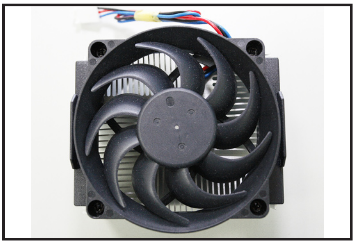


Površina procesora

2. Proverite da nema kontaminatora na rashladnom profilu i ventilatoru.



Pogled sa strane na rashladni profil i ventilator



Pogled odozgo na rashladni profil i ventilator

3. Pratite uputstva rashladnog profila i proizvođača ventilatora kako bi očistili kontaminatore koji će usporiti okretanje ventilatora.

3.2 Drugi uobičajeni problemi

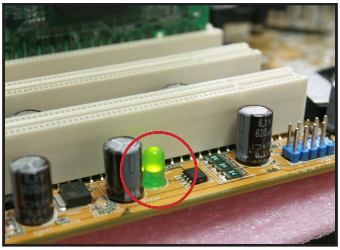
- Kada uklanjate uređaje iz sistema, proverite da su svi kablovi za struju izvučeni.
- Sve poruke o grešci biće prikazane na ekranu tokom Power-On Self- Testa (samo-testiranja sa uključenim uređajem), (POST).
- Ukoliko začujete bipove BIOS-a, vratite se na odeljak 1.11 za više detalja.
- Pogledajte tabelicu ispod, sa opcijama koje treba proveriti, za više detalja.

	Opcije koje treba proveriti					
	Svetleća dioda napajanja	**Prikaz na ekranu**	**Rasladni profil i ventilator**	**BIOS bipće**	**Poruka o grešci**	**Referentna stranica**
Nema napajanja	Isključeno (Off)	Ne	Stop	Ne	Nije dostupno	3-4
Nema prikaza na ekranu	Uključeno (On)	Ne	Stop	Ne	Nije dostupno	3-5
	Uključeno (On)	Ne	Radi	Ne	Nije dostupno	3-5
	Uključeno (On)	Ne	Radi	Ne	Nije dostupno	3-5
Neuspeh kod ulaženja u OS	Uključeno (On)	Da	Radi	Ne	Da	3-5
	Uključeno (On)	Da	Radi	Ne	Da	3-5
	Uključeno (On)	Da	Radi	Ne	Ne	3-5

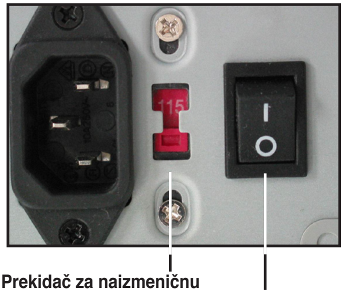
Ukoliko je problem popravljen ali dođe do novog problema, pogledajte tabelu sa opcijama koje treba proveriti ponovo. Ukoliko se problem nastavi, kontaktirajte svog prodavca ili tim za tehničku podršku ASUS-a za dalju pomoć.

3.2.1 Nema napajanja

ASUS matične ploče dolaze sa svetlećom diodom za struju u režimu čekanja. Svetleća dioda se pali da bi pokazala da je sistem uključen (ON). Ukoliko svetleća dioda ostane neupaljena, pratite uputstva ispod da bi popravili problem.



1. Proverite da ste podesili svoje napajanje na odgovarajući napon naizmenične struje u svom području, i napajanje se pali.

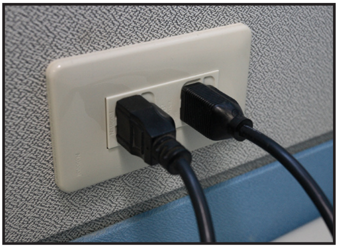


Prekidač za naizmeničnu struju ulaznog napona

Prekidač za struju "—": Uključen; "O": Isključen (Off)

- Pre nego što podesite ulazni napon naizmenične struje, proverite da ste isključili kabl za struju. Ukoliko to ne uradite, napajanje će biti ozbiljno oštećeno.
- Ukoliko ne podesite napajanje na korektnu jačinu napona naizmenične struje, sistem će biti ozbiljno oštećen.

2. Proverite da je kabl za struju priključen za zidnu utičnicu.
    - Priključite kabl za struju direktno za zidnu utičnicu. NE povezujte ga direktno za produžni kabl za struju, neprekidni izvor energije (UPS) ili druge uređaje.
    - Zamenite priključke za struju sistema i monitora da bi proverili da li zidni priključak radi kako treba.



3. Ukoliko se problem nastavi, možda ćete morati da kontaktirate svog prodavca kako bi dobili novo napajanje. Ukoliko napajanje funkcioniše, kontaktirajte svog prodavca ASUS-ove matične ploče, radi korišćenja usluge garancije.

3.2.2 Neuspeh podizanja sistema; Nema prikaza na ekranu

Do većine neuspešnih podizanja sistema i nepostojanja prikaza na ekranu dolazi usled neispravnosti uređaja ili pogrešne instalacije. Pratite uputstva ispod da bi rešili problem.

1. Proverite da su svi kablovi za struju priključeni, uključujući sistem i monitor.
2. Proverite da li dodatni uređaji uzrokuju ovaj problem.
   - Uklonite sve dodatne kartice i uređaje. Upotrebite isključivo matičnu ploču, monitor, VGA karticu, memorijske module, jedinicu za napajanje, rashladni profil i ventilator i miš da bi restartovali sistem.

   - Ukoliko sistem radi normalno, jedan od dodatnih uređaja uzrokuje problem. Ponovo instalirajte (reinstalirajte) u sistem dodatne uređaje koje ste prethodno uklonili, jedan po jedan i pronađite defektivni uređaj.
3. Proverite da li osnovni uređaji sistema uzrokuju ovaj problem.
   - Ukoliko imate neke rezervne uređaje, možete da ih zamenite jedan po jedan da bi pronašli koji uređaj ne radi, i to prema sledećem rasporedu: memorijski modul, procesor, matična ploča, hard/optički disk drajv, tastatura/miš.

Kada pronađete koji uređaj ne radi, kontaktirajte svog prodavca tog uređaja radi servisiranja.

3.2.3 Neuspeh u pokušaju da se uđe u operativni sistem

1. Ukoliko do problema dođe nakon što dodate hardver. Uklonite novi hardver koji ste dodali i restartujte sistem. Ukoliko sistem radi kako treba bez ovog hardvera, ovaj uređaj je možda pokvaren ili nekompatibilan sa sistemom. Kontaktirajte prodavca uređaja za pomoć.
2. Ukoliko do problema dođe nakon što instalirate softver ili drajver. Pratite uputstva ispod da bi rešili problem.
   a. Uđite u operativni sistem u safe mode-u (bezbednom režimu) i uklonite softver ili drajver.

   b. Kontaktirajte kompaniju čiji je operativni sistem za dalju podršku.

   c Ukoliko prethodna uputstva ne uspeju da reše problem, možda ćete morati da formatirate svoj hard disk drajv i ponovo instalirate novi operativni sistem.

3. Ukoliko do problema dođe nakon što promenite podešavanja BIOS-a, restartujte kompjuter i uđite u BIOS da bi učitali osnovnu postavu sistema. Pogledajte Uputstvo za korišćenje matične ploče za više detalja.
4. Ukoliko do problema dođe usled kompjuterskog virusa ili koruptovanih fajlova, pratite uputstva ispod da bi popravili problem.
    a. Uđite u operativni sistem u safe mode-u (bezbednom režimu) i obavite kompletno sistemsko skeniranje za viruse koristeći anti-virus program.

    b. Kontaktirajte kompaniju čiji je operativni sistem za dalju podršku.

    c Ukoliko prethodna uputstva ne uspeju da reše problem, možda ćete morati da formatirate svoj hard disk drajv i ponovo instalirate novi operativni sistem.

3.2.4 Često postavljana pitanja

Pitanje br. 1: Memorija prijavljena u POST-u se razlikuje od instalirane memorije.

Odgovor 1: Do prijavljene razlike između memorija može da dođe usled defektivnih memorijski modula ili neispravne DIMM instalacije. Uverite se da su DIMM memorije u dobrom stanju i da su instalirane korektno. Pogledajte Uputstvo za korišćenje matične ploče za više detalja. Ukoliko instalirate 4.0 GB memorije a sistem prijavljuje 3.X GB, to je normalno.

Pitanje br. 2: Sistem ne može da detektuje flopi disk drajv, ali svetleća dioda za flopi ostaje upaljena.

Odgovor 2: Kablovi flopi diska su pogrešno instalirani. Proverite da se crvena traka na kablu (kraj čiode1) poklapa sa čiodom1 na flopi disk drajvu.

Pitanje br. 3: Neuspeh podizanja operativnog sistema nakon priključivanja USB fleš diska ili eksternih hard diskova.

Odgovor3: Kada sistem detektuje USB fleš disk ili hard diskove sa USB interfejsom, može promeniti prioritet uređaja sa koga se podiže sistem. Uklonite USB uređaje i restartujte sistem.

Pitanje br. 4: Prilikom instaliranja Windows XP-a, ne uspeva da locira hard disk drajvove koji su instalirani na RAID kontroler.

Odgovor4: Windows XP ne uključuje drajver za RAID kontroler tako da se hard disk drajvovi ne detektuju. Iskopirajte drajver za RAID kontroler na flopi disk i kada startujete sistem sa Windows XP diskom, pritisnite <F6> da bi drajver očitali sa flopi diska. Pogledajte Uputstvo za korišćenje matične ploče za više detalja.

Poglavlje 4: Saveti za brigu o kompjuteru

4.1 Ispravna briga o vašem kompjuteru

Vaš personalni kompjuter je kao i bilo koji drugi uređaj. Držite svoj kompjuter daleko od vlage, direktne sunčeve svetlosti i izvora staričkog elektriciteta. Ne treba da pomerate kompjuter kada je upaljen da ga ne bi oštetili. Unutrašnja prašina uticaće na rad disk drajva i doprineće problemu pregrevanja koji dovodi do pada sistema kompjutera ili oštećenja komponenti.

4.2 Osnovno znanje

1. Pokrijte svoj kompjuter prekrivačem protiv prašine kada ga ne koristite.
2. Kada koristite svoj kompjuter, ne stavljajte ništa na monitor kako ne bi blokirali ventilacione rupe. Prevelika vrućina će dovesti do kvara monitora.
3. Ne stavljajte kompjuter blizu zida i ostavite nešto prostora za rasipanje toplote. Pregrevanje će dovesti do pada sistema.
4. Smestite kompjuter na stabilnu površinu.
5. Držite kompjuter dalje od područja sa ekstremnom temperaturom. Najbolja temperatura okruženja je 5°C do 30°C. Koristite klima uređaj ili električni ventilator da bi bolje rasipali toplotu.
6. Organizujte kablove u obliku trake uredno da bi izbegli nedovoljan protok vazduha.

4.3 Znanje o načinu korišćenja

1. Uključujte i gasite svoj kompjuter redovno. Ukoliko vaš kompjuter mora da bude uključen tokom dužeg vremenskog perioda, koristite bolji sistem/ventilator za procesor u napajanje sa visokim naponom.
2. Iznenadan nestanak struje oštetiće hard disk drajv. Kada je napon nestabilan, preporučuje se da dodate neprekidan izvor napajanja svom kompjuteru.
3. Organizujte fajlove sa podacima, obavite skeniranje protiv virusa i ažurirajte svoj anti virus program i redovno defragmentirajte disk.
4. Redovno očistite prašinu sa svog kompjutera i sam kompjuter. (Isključite sve kablove za struju pre čišćenja)
    - Deinstalirajte matičnu ploču i hard/optičke disk drajvove, potom ih očistite mlazom vazduha ili mekom četkom.

    - Uklonite prašinu i dlake od kose na napajanju antistatičkim vakuumom.

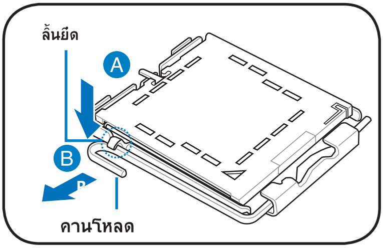
4.4 Saveti

1. Ukoliko ne planirate da koristite kompjuter duže vreme, stavite neke absorbere vlage u kućište da bi sprečili oštećenje od vlage.
2. U nekim vrućim i vlažnim područjima, bilo bi dobro da upalite kompjuter bar svake druge nedelje. Ovo takođe pomaže da se spreči oštećenje od vlage.

บทที่ 1: การเริ่มต้นอย่างเร็ว

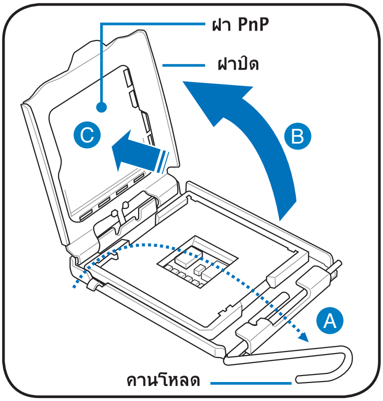
1.1 การติดตั้ง CPU

1.1.1 ซ็อกเก็ต Intel® LGA775



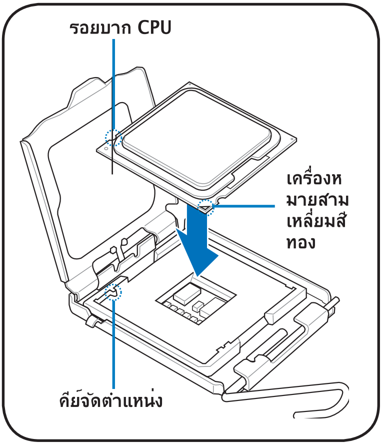
1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด
2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A), จากนั้นเลื่อนไปทางซ้าย (B) จนกระทั่งคลายออกจากลิ้นยึด

> เพื่อป้องกันความเสียหายที่จะเกิดกับขาซ็อกเก็ต อย่าถอดฝา PnP ออกจนกว่าคุณจะติดตั้ง CPU



3. ยกคานโหลดขึ้นในทิศทางตามลูกศรโดยทำมุม 135º
4. ยกฝาปิดด้วยนิ้วหัวแม่มือและนิ้วชี้ของคุณโดยทำมุม 100º

5. วางตำแหน่ง CPU บนซ็อกเก็ต, ตรวจดูให้แน่ใจว่ารูปสามเหลี่ยมสีทองอยู่ที่มุมซ้ายล่างของซ็อกเก็ต, จากนั้นวางรอยบาก CPU ให้ตรงกับคีย์จัดตำแหน่งซ็อกเก็ต

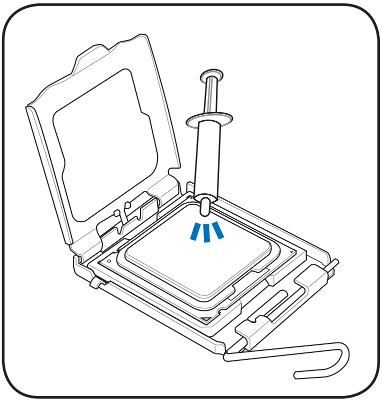


CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!

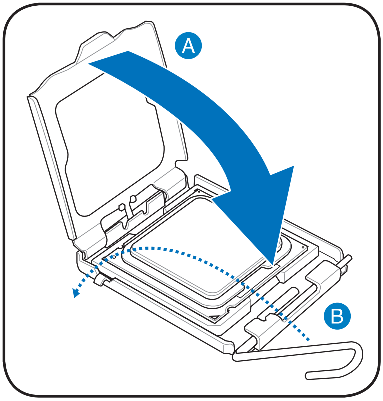
6. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ

ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

วัสดุนำความร้อนเป็นพิษ และไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตา หรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์



7. ปิดฝาปิด (A), จากนั้นผลักคานโหลด (B) จนกระทั่งยึดติดลงในลิ้นยึด

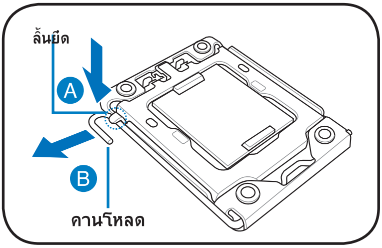


1.1.2 ซ็อกเก็ต Intel® LGA 2011

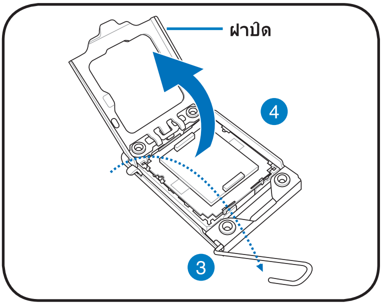
1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด

2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A จากนั้นเลื่อนไปทางซ้าย (B) จนกระทั่งคลายออกจากลิ้นยึด

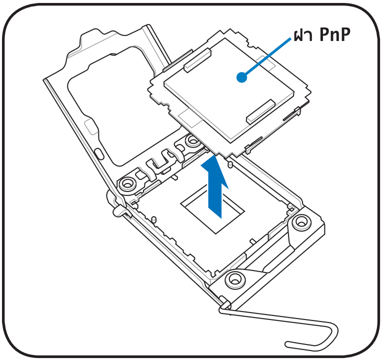
เพื่อป้องกันความเสียหายที่จะเกิดกับขาซ็อกเก็ต อย่าถอดฝา PnP ออกจนกว่าคุณจะติดตั้ง CPU



3. ยกคานโหลดขึ้นในทิศทางตามลูกศรโดยทำมุม 135°
4. ยกฝาปิดด้วยนิ้วหัวแม่มือและนิ้วชี้ของคุณโดยทำมุม 100° (4A) จากนั้นผลักฝา PnP จากหน้าต่างแผ่นโหลดเพื่อนำออก (4B)

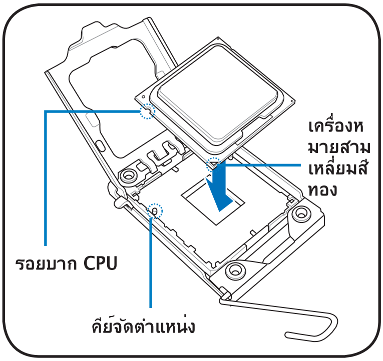


5. แกะฝา PnP จากซ็อกเก็ต CPU



6. วางตำแหน่ง CPU บนซ็อกเก็ต, ตรวจดูให้แน่ใจว่ารูปสามเหลี่ยมสีทองอยู่ที่มุมซ้ายล่างของซ็อกเก็ต, จากนั้นวางรอยบาก CPU ให้ตรงกับคีย์จัดตำแหน่งซ็อกเก็ต

CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!



7. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ

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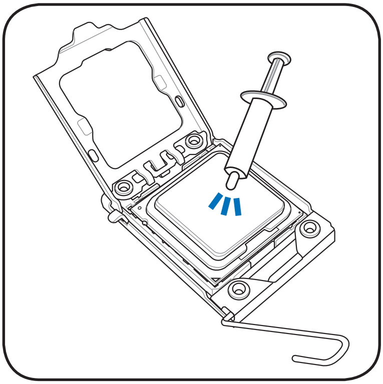
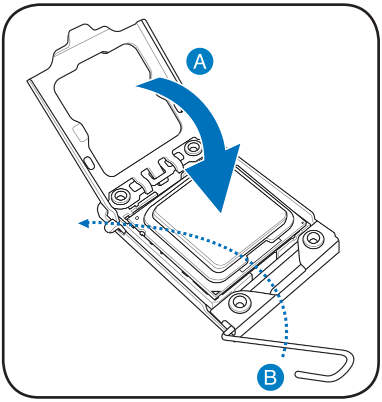


8. ปิดฝาปิด (A), จากนั้นผลักคานโหลด (B) จนกระทั่งยึดติดลงในลิ้นยึด



1.1.3 ซ็อกเก็ต Intel® LGA1156

CPU LGA1155 ใช้งานไม่ได้กับซ็อกเก็ต LGA1156 อย่าติดตั้ง CPU LGA1155 บนซ็อกเก็ต LGA1156

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด
2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A), จากนั้นเลื่อนไปทางขวา (B) จนกระทั่งคลายออกจากลิ้นยึด

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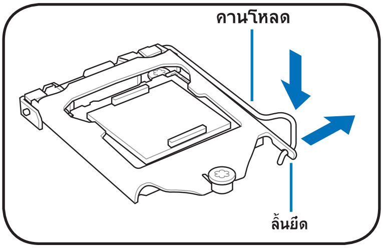
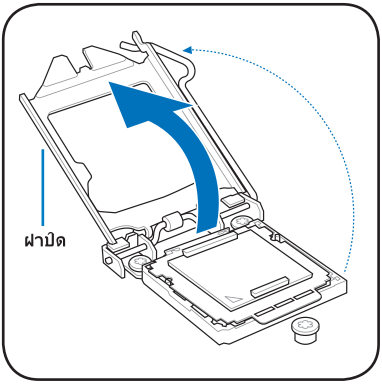
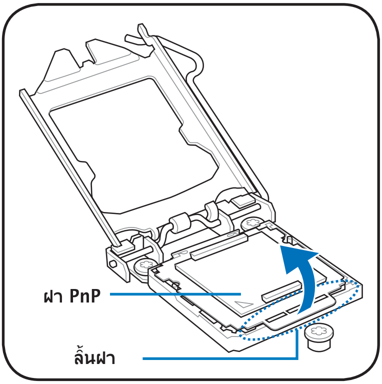


3. ยกคานโหลดในทิศทางตามลูกศร จนกระทั่งแผ่นโหลดถูกยกขึ้นอย่างสมบูรณ์



4. แกะฝา PnP จากซ็อกเก็ต CPU โดยการยกเฉพาะแท็บเท่านั้น



5. วางตำแหน่ง CPU บนซ็อกเก็ต, ตรวจดูให้แน่ใจว่ารูปสามเหลี่ยมสีทองอยู่ที่มุม-ซ้ายล่างของซ็อกเก็ต, จากนั้นวางรอยบาก CPU ให้ตรงกับคีย์จัดตำแหน่งซ็อกเก็ต

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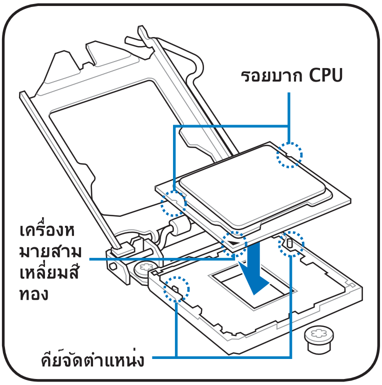
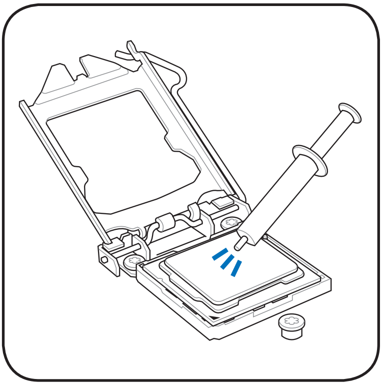


6. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ



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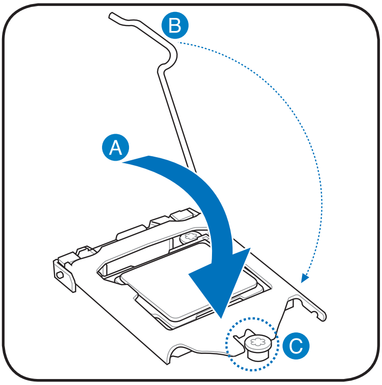
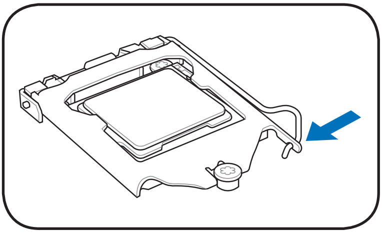
7. ปิดแผ่นโหลด (A),
จากนั้นผลักคานโหลดลง (B),
ให้แน่ใจว่าขอบด้านหน้าของแผ่น
โหลดเลื่อนไปข้างใต้ล็อคกั้น (C)



8. ใส่คานโหลดข้างใต้ลิ้นกั้น

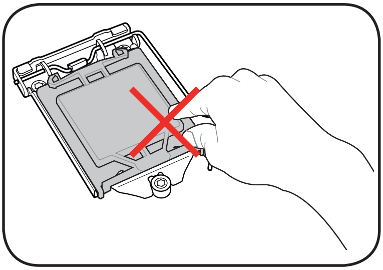


1.1.4 ซ็อกเก็ต Intel® LGA1155 (ฝา PnP บนแผ่นโหลด)

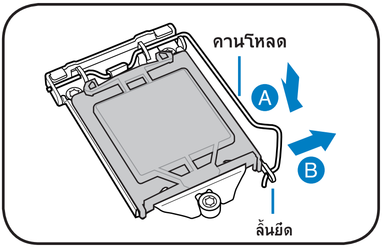
CPU LGA1156 ใช้งานไม่ได้กับซ็อกเก็ต LGA1155 อย่าติดตั้ง CPU LGA1156 บนซ็อกเก็ต LGA1155

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด

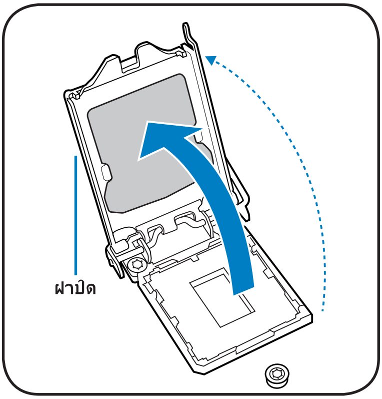
2. ให้แน่ใจว่าจะไม่แกะฝา PnP ออกจากซ็อกเก็ต CPU ก่อนที่คุณจะติดตั้ง CPU



3. กดคานโหลดด้วยนิ้วหัวแม่มือ (A), จากนั้นเลื่อนไปทางขวา (B) จนกระทั่งคลายออกจากลิ้นยึด

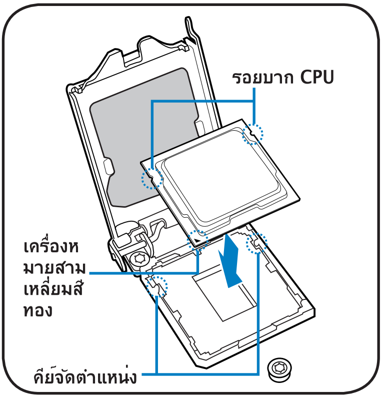


4. ยกคานโหลดในทิศทางตามลูกศร จนกระทั่งแผ่นโหลดถูกยกขึ้นอย่างสมบูรณ์

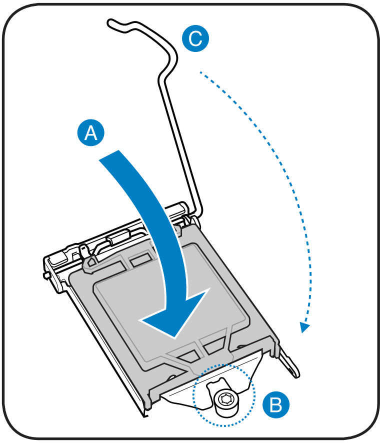


5. วางตำแหน่ง CPU บนซ็อกเก็ต, ตรวจดูให้แน่ใจว่ารูปสามเหลี่ยมสีทองอยู่ที่มุม-ซ้ายล่างของซ็อกเก็ต, จากนั้นวางรอยบาก CPU ให้ตรงกับคีย์จัดตำแหน่งซ็อกเก็ต

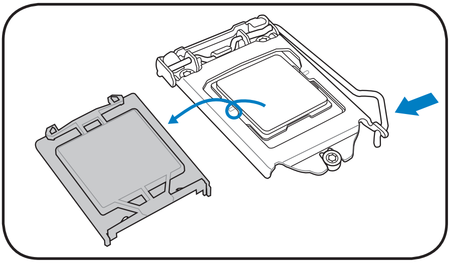
> CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!


รอยบาก CPU
เครื่องหมายสามเหลี่ยมสีทอง
คีย์จัดตำแหน่ง

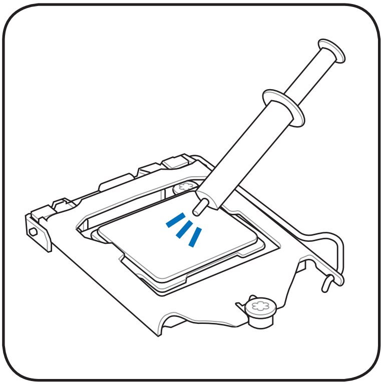
6. ปิดแผ่นโหลด (A), ให้แน่ใจว่าขอบด้านหน้าของแผ่นโหลดเลื่อนเข้าไปภายใต้ล็อคสำหรับยึด (B) จากนั้นผลักคานโหลด (C) ลง



7. ใส่คานโหลดภายใต้ลิ้นยึด เพื่อแกะฝา PnP จากซ็อกเก็ต CPU



8. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ



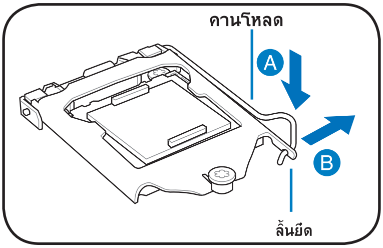
ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

วัสดุนำความร้อนเป็นพิษและไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตาหรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์

1.1.5 ซ็อกเก็ต Intel® LGA1155 (ฝา PnP ข้างใต้แผ่นโหลด)

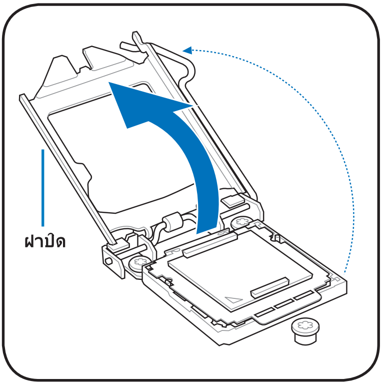
CPU LGA1156 ใช้งานไม่ได้กับซ็อกเก็ต LGA1155 อย่าติดตั้ง CPU LGA1156 บนซ็อกเก็ต LGA1155

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด
2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A), จากนั้นเลื่อนไปทางขวา (B) จนกระทั่งคลายออกจากลิ้นยึด

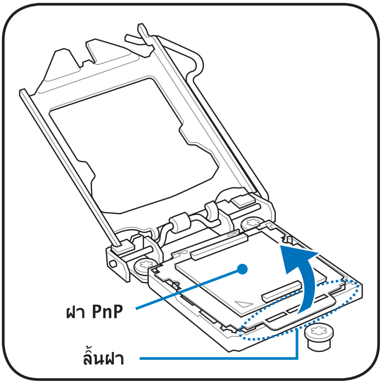


เพื่อป้องกันความเสียหายที่จะเกิดกับขาซ็อกเก็ต อย่าถอดฝา PnP ออกจนกว่าคุณจะติดตั้ง CPU

3. ยกคานโหลดในทิศทางตามลูกศร จนกระทั่งแผ่นโหลดถูกยกขึ้นอย่างสมบูรณ์

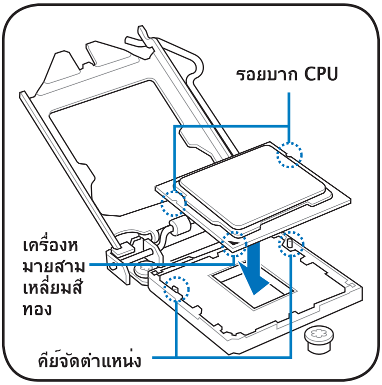


4. แกะฝา PnP จากซ็อกเก็ต CPU โดยการยกเฉพาะแท็บเท่านั้น



5. วางตำแหน่ง CPU บนซ็อกเก็ต, ตรวจดูให้แน่ใจว่ารูปสามเหลี่ยมสีทองอยู่ที่มุม-ซ้ายล่างของซ็อกเก็ต, จากนั้นวางรอยบาก CPU ให้ตรงกับคีย์จัดตำแหน่งซ็อกเก็ต

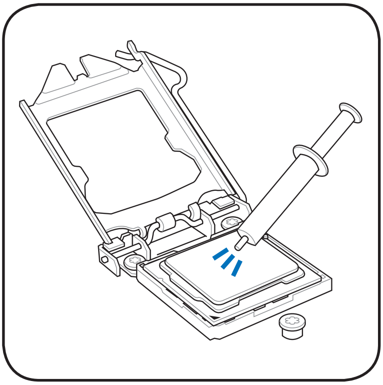
CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!



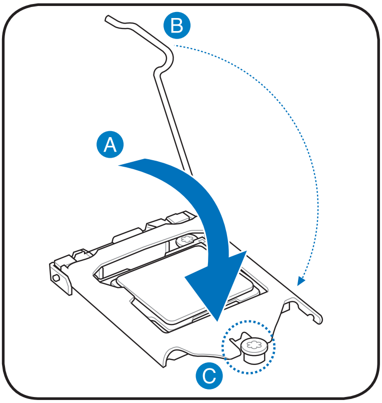
6. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ

ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

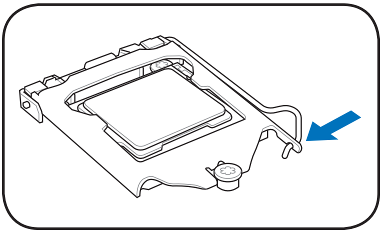
วัสดุนำความร้อนเป็นพิษและไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตาหรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์



7. ปิดแผ่นโหลด (A),
จากนั้นผลักคานโหลดลง (B),
ให้แน่ใจว่าขอบด้านหน้าของแผ่น
โหลดเลื่อนไปข้างใต้ล็อคกั้น (C)



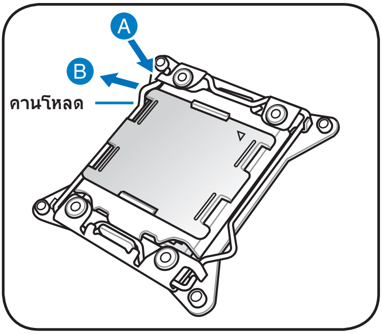
8. ใส่คานโหลดข้างใต้ลิ้นกั้น



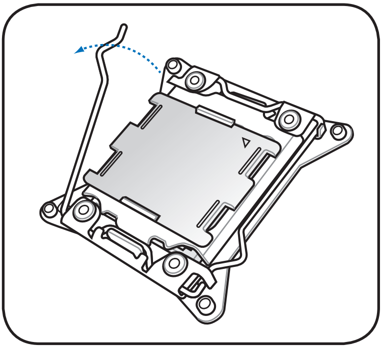
1.1.6 ซ็อกเก็ต Intel® LGA 2011

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์
2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A จากนั้นเลื่อนไปทางซ้าย (B) จนกระทั่งคลายออกจากลิ้นยึด

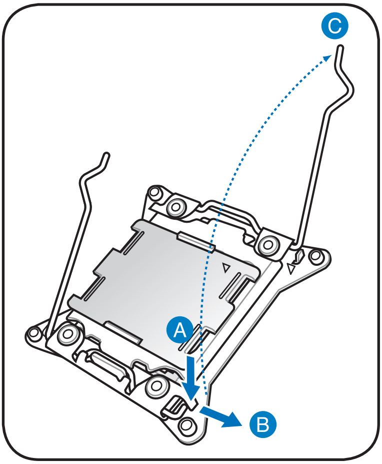
เพื่อป้องกันความเสียหายที่จะเกิดกับขาซ็อกเก็ต อย่าถอดฝา PnP ออกจนกว่าคุณจะติดตั้ง CPU



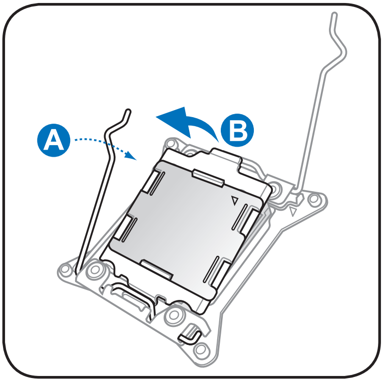
3. ยกคานโหลดขึ้นเล็กน้อยในทิศทางที่แสดงโดยลูกศร



4. ปิดแผ่นโหลด (A), จากนั้นผลักคานโหลดลง (B), ให้แน่ใจว่าขอบด้านหน้าของแผ่นโหลดเลื่อนไปข้างใต้ล็อคกั้น (C) ยกคานโหลดขึ้นเล็กน้อยในทิศทางที่แสดงโดยลูกศร

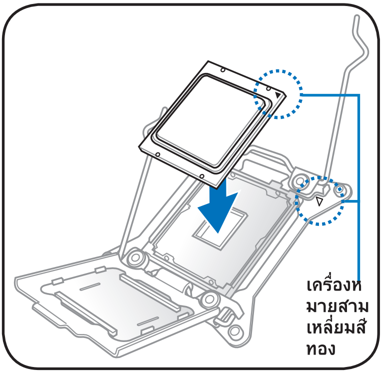


5. ผลักคานโหลด (A) ไปทางซ้ายเพื่อยกแผ่นโหลด (B)

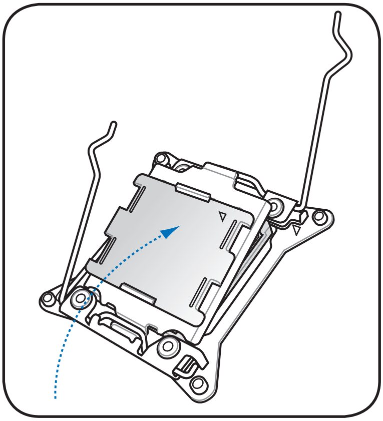


6. วางตำแหน่ง CPU เหนือซ็อกเก็ต ตรวจดูให้แน่ใจว่าเครื่องหมายสามเหลี่ยมอยู่ที่มุมขวาบน ของซ็อกเก็ต

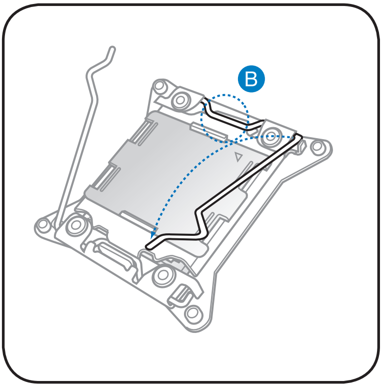
CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!



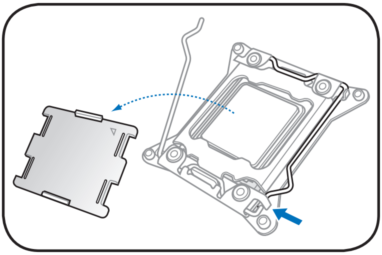
7. ปิดแผ่นโหลด



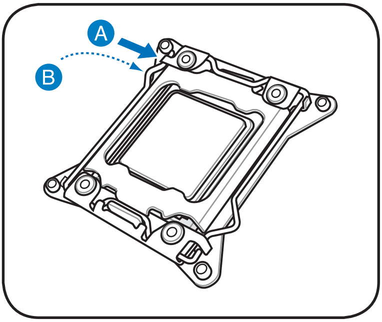
8. กดคานโหลดด้านขวาลง (A), ตรวจดูให้แน่ใจว่าขอบของแผ่นโหลดถูกยึดแน่นด้วยคาน (B)



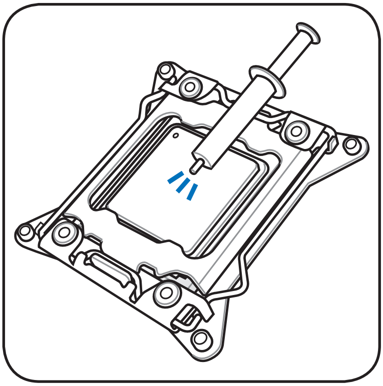
9. ใส่คานโหลดด้านขวาข้างใต้ลิ้นกั้น แกะฝา PnP จากซ็อกเก็ต CPU



10. กดคานโหลดด้านซ้ายลง (A), จากนั้นใส่คานไว้ข้างใต้ลิ้นกั้น (B)



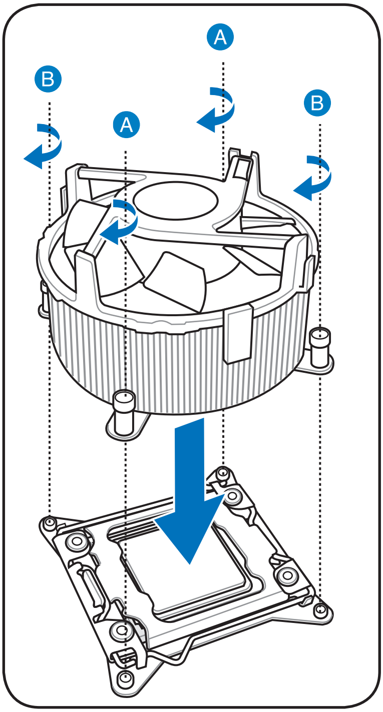
11. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ



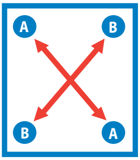
ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

วัสดุนำความร้อนเป็นพิษ และไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตา หรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์

12. วางครีบระบายความร้อนที่ส่วนบนของ CPU ที่ติดตั้ง ให้แน่ใจว่าตัวยึดทั้งสี่อยู่ตรงกับรูบนซ็อกเก็ต CPU
13. ไขสกรูทั้ง 4 ตัวด้วยไขควง Philips (แฉก) เพียงแค่พอที่จะยึดครีบระบายความร้อนเข้ากับซ็อกเก็ต CPU เมื่อสกรู 4 ตัวต่ออยู่ ให้ไขให้แน่นทีละตัวเพื่อยึดครีบระบายความร้อนให้แน่น



ไขสกรูครีบระบายความร้อนทั้งสี่ตัวในลำดับทแยงมุม

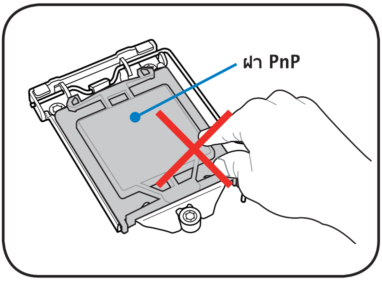


1.1.7 ซ็อกเก็ต Intel® LGA1150 (ฝา PnP บนแผ่นโหลด)

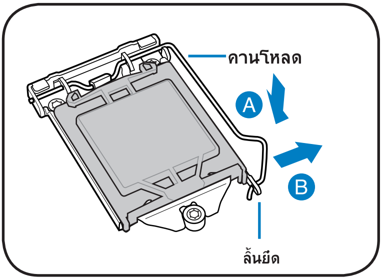
ตรวจดูให้แน่ใจว่าคุณติดตั้ง CPU ที่ถูกต้องที่ออกแบบมาสำหรับซ็อกเก็ต LGA1150 เท่านั้น อย่าติดตั้ง CPU ที่ออกแบบมาสำหรับซ็อกเก็ต LGA1155 และ LGA1156 บนซ็อกเก็ต LGA1150

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด

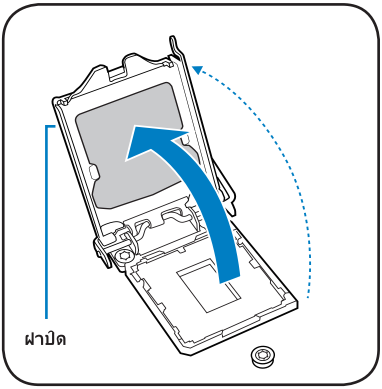
อย่าแกะฝา PnP จากซ็อกเก็ต CPU
การทำเช่นนั้นอาจทำให้ขาของซ็อกเก็ตงอได้ ดูภาพประกอบด้านล่างสำหรับตำแหน่งของฝา PnP.



2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A), จากนั้นเลื่อนไปทางขวา (B) จนกระทั่งคลายออกจากลิ้นยึด

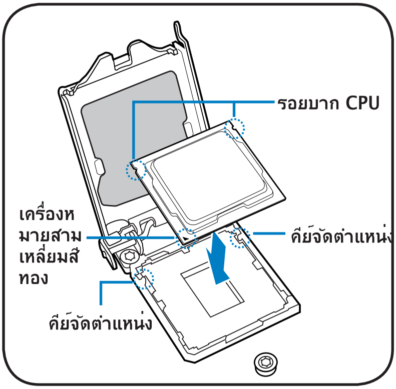


3. ยกคานโหลดในทิศทางตามลูกศร จนกระทั่งแผ่นโหลดถูกยกขึ้นอย่างสมบูรณ์

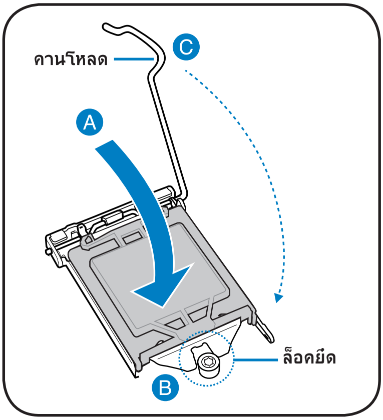


4. วางตำแหน่ง CPU เหนือซ็อกเก็ต ตรวจดูให้แน่ใจว่าสามเหลี่ยมสีทองอยู่ที่มุมซ้ายล่างของ ซ็อกเก็ต จากนั้นใส่ด้านที่มีรอยบากของ CPU เข้ากับด้านที่ตรงกันของซ็อกเก็ต

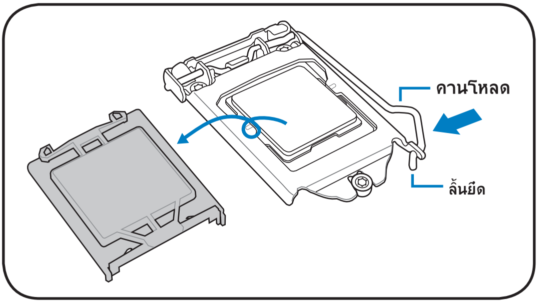
CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!


รอยบาก CPU
เครื่องหมายสามเหลี่ยมสีทอง
คีย์จัดตำแหน่ง
คีย์จัดตำแหน่ง

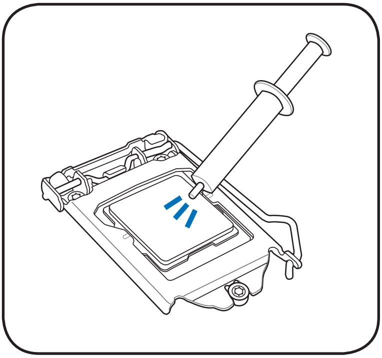
5. ปิดแผ่นโหลด (A), ให้แน่ใจว่าขอบด้านหน้าของแผ่นโหลดเลื่อนเข้าไปภายใต้ล็อคสำหรับยึด (B) จากนั้นผลักคานโหลด (C) ลง


คานโหลด
C
A
ล็อคยึด
B

6. ใส่คานโหลดภายใต้ลิ้นยึด เพื่อแกะฝา PnP จากซ็อกเก็ต CPU


คานโหลด
ลิ้นยึด

7. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ



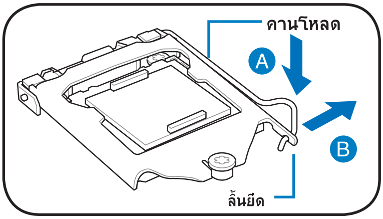
ครีบระบายความร้อนบางอย่างมีการป้ายสาร ระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

วัสดุนำความร้อนเป็นพิษและไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตาหรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์

1.1.8 ซ็อกเก็ต Intel® LGA1150 (ฝา PnP ข้างใต้แผ่นโหลด)

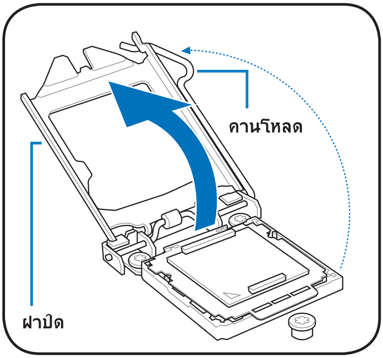
Ensure that you install the correct CPU designed for LGA1150 socket only. DO NOT install a CPU designed for LGA1155 and LGA1156 sockets on the LGA1150 socket.

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด
2. กดคานโหลดด้วยนิ้วหัวแม่มือ (A), จากนั้นเลื่อนไปทางขวา (B) จนกระทั่งคลายออกจากลิ้นยึด

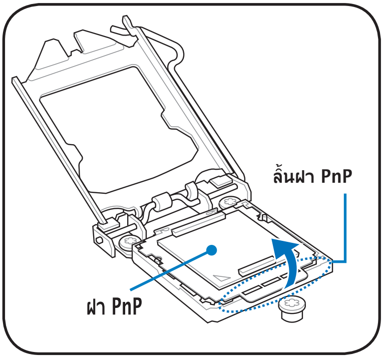


อย่าเพิ่งแกะฝา PnP ออกจากซ็อกเก็ต CPU การทำเช่นนี้อาจทำให้ขาของซ็อกเก็ตงอได้.

3. ยกคานโหลดในทิศทางตามลูกศร จนกระทั่งแผ่นโหลดถูกยกขึ้น อย่างสมบูรณ์

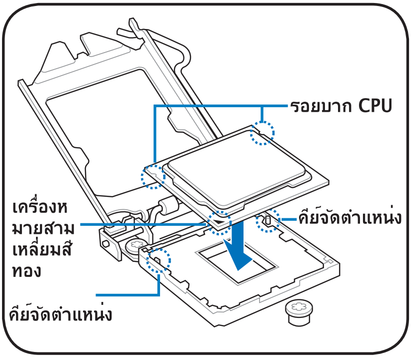


4. แกะฝา PnP จากซ็อกเก็ต CPU โดยการยกเฉพาะแท็บเท่านั้น



5. วางตำแหน่ง CPU เหนือซ็อกเก็ต ตรวจดูให้แน่ใจว่าสามเหลี่ยมสีทองอยู่ที่มุมซ้ายล่างของ ซ็อกเก็ต จากนั้นใส่ด้านที่มีรอยบากของ CPU เข้ากับด้านที่ตรงกันของซ็อกเก็ต

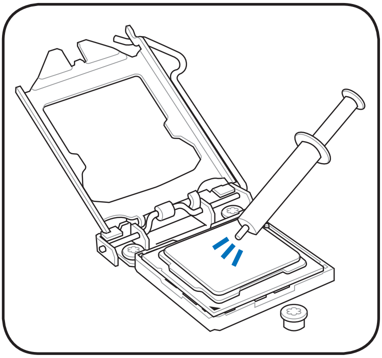
CPU ใส่ได้ในทิศทางที่ถูกต้องเพียงทิศทางเดียวเท่านั้น อย่าใช้แรงกด CPU เข้าไปในซ็อกเก็ต เพื่อป้องกันไม่ให้ขั้วต่อต่างๆ บนซ็อกเก็ตงอ และทำให้ CPU เสียหาย!


รอยบาก CPU
เครื่องหมายสามเหลี่ยมสีทอง
คีย์จัดตำแหน่ง
คีย์จัดตำแหน่ง

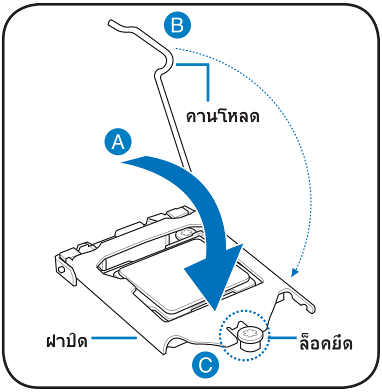
6. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ

ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

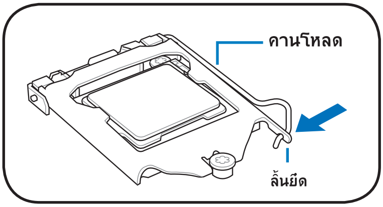
วัสดุนำความร้อนเป็นพิษและไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตาหรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์



7. ปิดแผ่นโหลด (A), จากนั้นผลักคานโหลดลง (B), ให้แน่ใจว่าขอบด้านหน้าของแผ่นโหลดเลื่อนไปข้างใต้ล็อคกั้น (C)


B
คานโหลด
A
ฝาปิด
ล็อคยึด
C

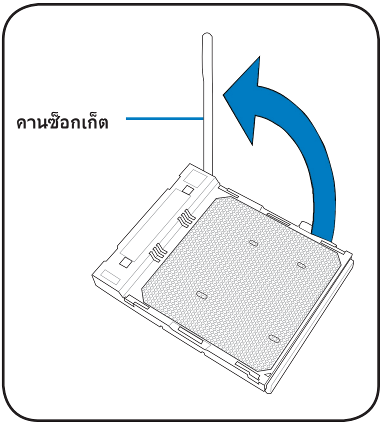
8. ใส่คานโหลดข้างใต้ลิ้นกั้น


คานโหลด
ลิ้นยึด

1.1.9 ซ็อกเก็ต AMD AM2 / AM2+ / AM3

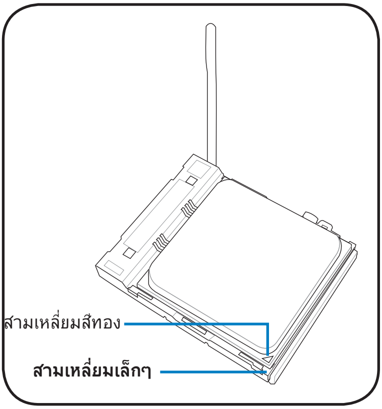
- ซ็อกเก็ต AMD AM2 และ AM2+ ใช้งานได้กับโปรเซสเซอร์ AMD AM2, AM2+ และ AM3
- ซ็อกเก็ต AMD AM3 ใช้งานได้กับโปรเซสเซอร์ AMD AM3 อย่าติดตั้งโปรเซสเซอร์ AMD AM2+ / AM2 บนซ็อกเก็ต AM3 เฉพาะเมนบอร์ด AM3 บางรุ่นที่สนับสนุนโปรเซสเซอร์ AM3+ โดยการอัปเกรด BIOS สำหรับรายละเอียดให้ดูไซต์สนับสนุนของ ASUS

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด
2. กดด้านข้างของคานเพื่อปลดล็อคซ็อกเก็ต จากนั้นยกขึ้นมาเป็นมุม 90º

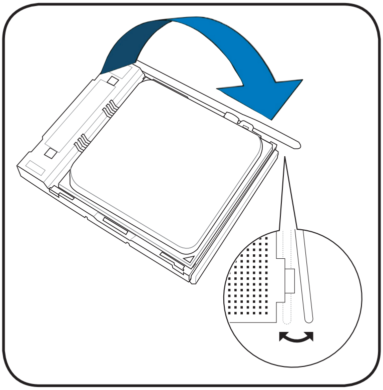


ตรวจดูให้แน่ใจว่าคานซ็อกเก็ตถูกยกขึ้นเป็นมุม 90º ไม่เช่นนั้น CPU จะใส่ได้ไม่สมบูรณ

3. จัดตำแหน่ง CPU บนซ็อกเก็ต โดยให้มุมของ CPU ที่มีรูปสามเหลี่ยมสีทองตรงกับมุมของซ็อกเก็ตที่มีรูปสามเหลี่ยมเล็กๆ
4. ค่อยๆ วาง CPU ลงในซ็อกเก็ตด้วยความระมัดระวัง จนกระทั่งสวมเข้าในตำแหน่ง



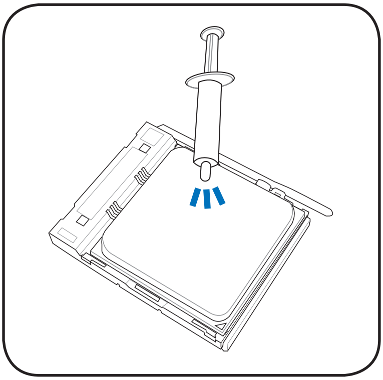
5. เมื่อ CPU อยู่ในตำแหน่งแล้ว, โยกคานซ็อกเก็ตลงเพื่อยึด CPU คานจะส่งเสียงคลิกที่ลิ้นด้านข้าง เพื่อแสดงว่าล็อคแล้ว



6. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ

ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

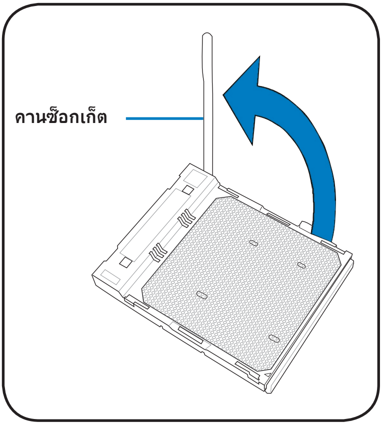
วัสดุนำความร้อนเป็นพิษ และไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตา หรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์



1.1.10 ซ็อกเก็ต AMD AM3+

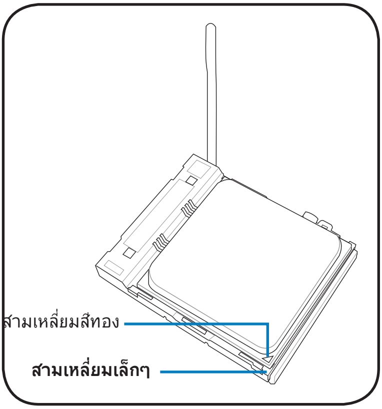
ซ็อกเก็ต AMD AM3+ ใช้งานได้กับโปรเซสเซอร์ AMD AM3+ และ AM3 เฉพาะเมนบอร์ด AM3 บางรุ่นที่สนับสนุนโปรเซสเซอร์ AM3+ โดยการอัปเกรด BIOS สำหรับรายละเอียด ให้ดูไซต์สนับสนุนของ ASUS

1. ค้นหาซ็อกเก็ต CPU บนเมนบอร์ด
2. กดด้านข้างของคานเพื่อปลดล็อคซ็อกเก็ต จากนั้นยกขึ้นมาเป็นมุม 90º

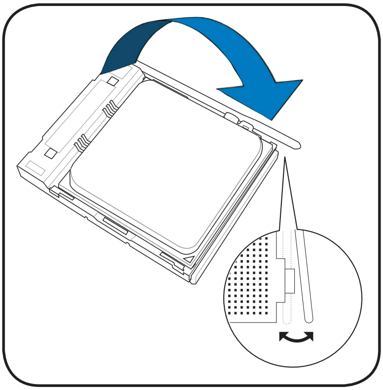


ตรวจดูให้แน่ใจว่าคานซ็อกเก็ตถูกยกขึ้นเป็นมุม 90º ไม่เช่นนั้น CPU จะใส่ได้ไม่สมบูรณ

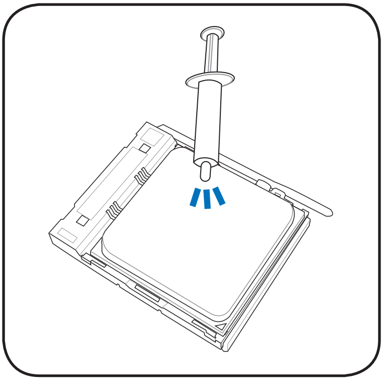
3. จัดตำแหน่ง CPU บนซ็อกเก็ต โดยให้มุมของ CPU ที่มีรูปสามเหลี่ยมสีทองตรงกับมุมของซ็อกเก็ตที่มีรูปสามเหลี่ยมเล็กๆ
4. ค่อยๆ วาง CPU ลงในซ็อกเก็ตด้วยความระมัดระวัง จนกระทั่งสวมเข้าในตำแหน่ง



5. เมื่อ CPU อยู่ในตำแหน่งแล้ว, โยกคานซ็อกเก็ตลงเพื่อยึด CPU คานจะส่งเสียงคลิกที่ลิ้นด้านข้าง เพื่อแสดงว่าล็อคแล้ว



6. ป้ายวัสดุนำความร้อนยังบริเวณที่เปิดของ CPU ที่จะติดครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ



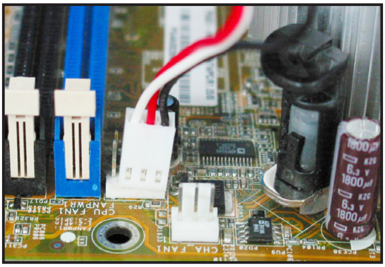
ครีบระบายความร้อนบางอย่างมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ ให้ข้ามขั้นตอนนี้ไป

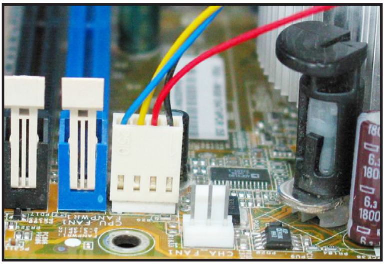
วัสดุนำความร้อนเป็นพิษและไม่สามารถรับประทานได้ ห้ามรับประทาน ถ้าวัสดุเข้าตาหรือสัมผัสกับผิวหนัง ให้ล้างออกทันที และขอความช่วยเหลือจากแพทย์

1.2 การติดตั้งครีบระบายความร้อน และพัดลม

ในการติดตั้งครีบระบายความร้อน และพัดลมของ CPU:

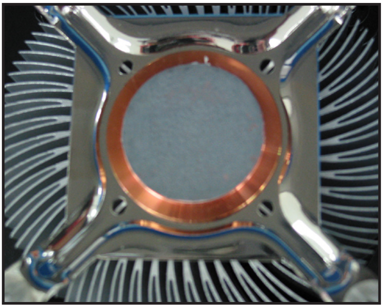
1. เลือกครีบระบายความร้อน และพัดลมที่ได้รับการรับรองจาก Intel หรือ AMD เพื่อประกอบตามประเภทเมนบอร์ดของคุณ มีขั้วต่อพัดลมแบบ 3 ขา (ซ้าย) และ 4 ขา (ขวา) เฉพาะพัดลม CPU ที่มีขั้วต่อ 4 ขาเท่านั้น ที่รองรับเทคโนโลยี ASUS Q-Fan





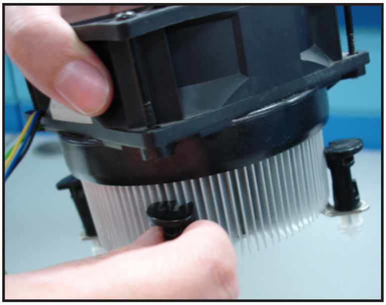
สำหรับครีบระบายความร้อนที่ได้รับการรับรองจาก Intel:

2. ครีบระบายความร้อนบางอย่างอาจมีการป้ายสารระบายความร้อนไว้ล่วงหน้า ในกรณีนี้ อย่าเช็ดออก และให้นำฟิล์มป้องกันออกก่อนการติดตั้งเท่านั้น ถ้าไม่มีสารนี้ ก่อนที่จะติดตั้งครีบระบายความร้อน ให้แต้มสารระบายความร้อนสองสามหยด ลงบนบริเวณที่เปิดของ CPU ซึ่งครีบระบายความร้อนจะสัมผัสด้วย ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ



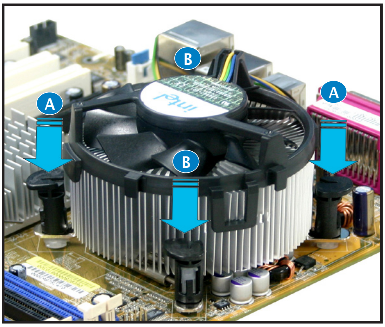
เพื่อป้องกันการปนเปื้อนของสารระบายความร้อน อย่าใช้นิ้วของคุณเพื่อเกลี่ยสารโดยตรง

3. จัดตัวยึดแต่ละตัวกับปลายด้านแคบของร่องโดยชี้ไปด้านนอก

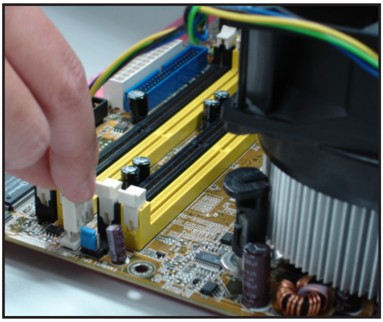


ไทย

4. ผลักตัวยึดสองตัวลงพร้อมกัน ในทิศทางทแยงมุม เพื่อยึดชุดครีบระบายความร้อน และพัดลมลงในตำแหน่ง



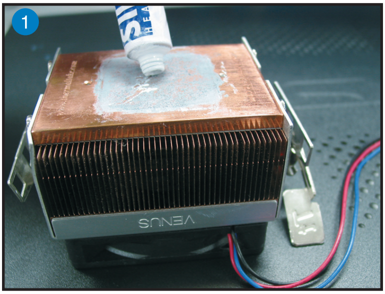
5. เชื่อมต่อสายเคเบิลพัดลม CPU เข้ากับขั้วต่อที่สัมพันธ์กันบนเมนบอร์ด

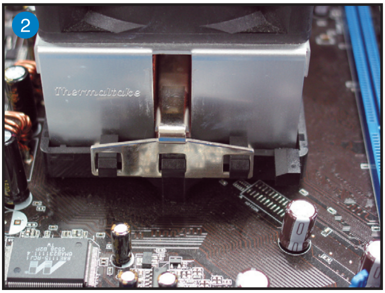


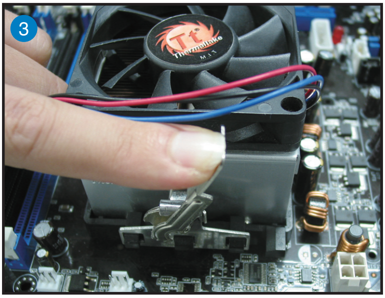
อย่าลืมที่จะเชื่อมต่อขั้วต่อพัดลม CPU! ถ้าคุณไม่เสียบขั้วต่อนี้ อาจเกิดข้อผิดพลาดในการตรวจดูแลฮาร์ดแวร์ขึ้นได้ และเราแนะนำให้คุณใช้ครีบระบายความร้อนแบบทรงกระบอก เพื่อให้มีพื้นที่ในการถ่ายเทความร้อนสูงสุด

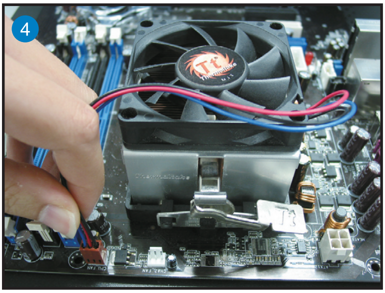
สำหรับครีบระบายความร้อนที่ได้รับการรับรองจาก AMD:

ปฏิบัติตามขั้นตอนด้านล่าง เพื่อติดตั้งครีบระบายความร้อนที่ได้รับการรับรองจาก AMD







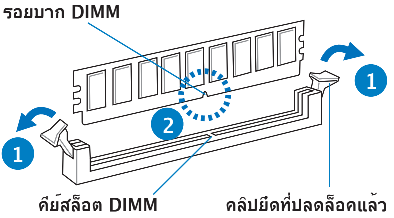


1.3 การติดตั้ง DIMM

ให้แน่ใจว่าได้ถอดปลั๊กเพาเวอร์ซัพพลายก่อนที่จะเพิ่มหรือถอด DIMM หรืออองค์ประกอบอื่นๆ ของระบบ การไม่ทำเช่นนี้ อาจทำให้เกิดความเสียหายอย่างรุนแรงกับทั้งเมนบอร์ด และองค์ประกอบต่างๆ ได้

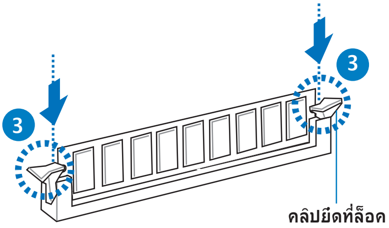
การติดตั้ง DIMM บนซ็อกเก็ต DIMM แบบคลิปคู่

1. ปลดล็อคซ็อกเก็ต DIMM โดยการกดคลิปยึดออกไปด้านนอก
2. จัดทิศทาง DIMM บนซ็อกเก็ตโดยให้รอยบากบน DIMM ตรงกับคีย์สล็อต DIMM บนซ็อกเก็ต



DIMM มีการทำเครื่องหมายด้วยรอยบาก อย่าใช้แรงกด DIMM เข้าไปในซ็อกเก็ตในทิศทางที่ไม่ถูกต้อง เพื่อหลีกเลี่ยงความเสียหายที่จะเกิดกับ DIMM

3. ถือ DIMM โดยจับที่ปลายทั้งสองด้าน จากนั้นใส่ DIMM ลงในซ็อกเก็ตทางแนวตั้ง กดอย่างมั่นคงที่ปลายทั้งสองข้างของ DIMM พร้อมกันจนกระทั่งคลิปดีดกลับเข้าตำแหน่ง และไม่สามารถผลัก DIMM เข้าไปได้อีก เพื่อให้แน่ใจว่าใส่ DIMM อย่างเหมาะสม

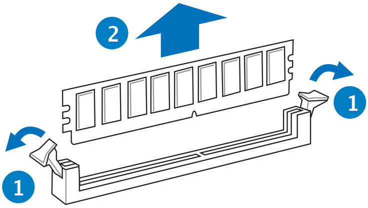


ใส่ DIMM ลงในซ็อกเก็ต ทางแนวตั้งเสมอ เพื่อป้องกันรอยบาก DIMM เสียหาย

- ในการติดตั้ง DIMM ตั้งแต่ 2 ตัวขึ้นไป ให้อ่านคู่มือผู้ใช้ที่อยู่ในบรรจุภัณฑ์ของเมนบอร์ด
- ดูคู่มือผู้ใช้สำหรับรายการตัวแทนจำหน่ายโมดูลหน่วยความจำที่ได้รับการรับรอง

การถอด DIMM จากซ็อกเก็ต DIMM แบบคลิปคู่

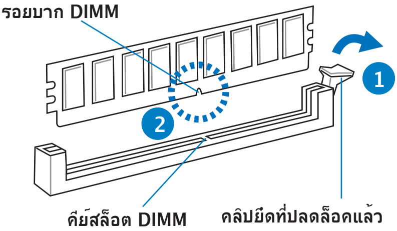
1. กดที่ยึดด้านนอกพร้อมกันเพื่อปลดล็อค DIMM
2. นำ DIMM ออกจากซ็อกเก็ต



ใช้นิ้วช่วยดัน DIMM เบาๆ ในขณะที่กดคลิปยึด DIMM อาจเสียหายได้เมื่อถูกดีดออกมาด้วยแรงที่มากเกินไป

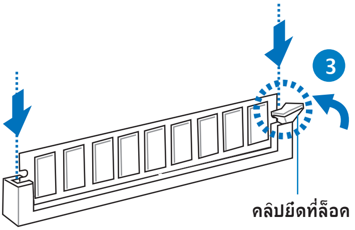
การติดตั้ง DIMM บนซ็อกเก็ต DIMM แบบคลิปเดี่ยว

1. ปลดล็อคซ็อกเก็ต DIMM โดยการกดคลิปยึดออกไปด้านนอก
2. จัดทิศทาง DIMM บนซ็อกเก็ต โดยให้รอยบากบน DIMM ตรงกับคีย์สล็อต DIMM บนซ็อกเก็ต



DIMM มีการทำเครื่องหมายด้วยรอยบาก อย่าใช้แรงกด DIMM เข้าไปในซ็อกเก็ตในทิศทางที่ไม่ถูกต้อง เพื่อหลีกเลี่ยงความเสียหายที่จะเกิดกับ DIMM

3. ถือ DIMM โดยจับที่ปลายทั้งสองด้าน จากนั้นใส่ DIMM ลงในซ็อกเก็ตทางแนวตั้ง กดอย่างมั่นคงที่ปลายทั้งสองข้างของ DIMM พร้อมกันจนกระทั่งคลิปดีดกลับเข้าตำแหน่ง และไม่สามารถผลัก DIMM เข้าไปได้อีก เพื่อให้แน่ใจว่าใส่ DIMM อย่างเหมาะสม

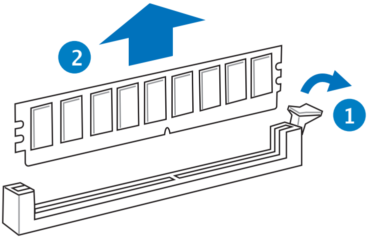


ใส่ DIMM ลงในซ็อกเก็ต ทางแนวตั้งเสมอ เพื่อป้องกันรอยบาก DIMM เสียหาย

- ในการติดตั้ง DIMM ตั้งแต่ 2 ตัวขึ้นไป ให้อ่านคู่มือผู้ใช้ที่อยู่ในบรรจุภัณฑ์ของเมนบอร์ด
- ดูคู่มือผู้ใช้สำหรับรายการตัวแทนจำหน่ายโมดูลหน่วยความจำที่ได้รับการรับรอง

การถอด DIMM จากซ็อกเก็ต DIMM แบบคลิปเดี่ยว

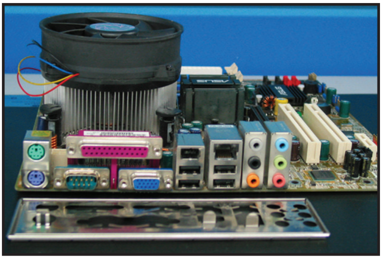
1. กดที่ยึดด้านนอก เพื่อปลดล็อค DIMM
2. นำ DIMM ออกจากซ็อกเก็ต



ใช้นิ้วช่วยดัน DIMM เบาๆ ในขณะที่กดคลิปยึด DIMM อาจเสียหายได้เมื่อถูกดีดออกมาด้วยแรงที่มากเกินไป

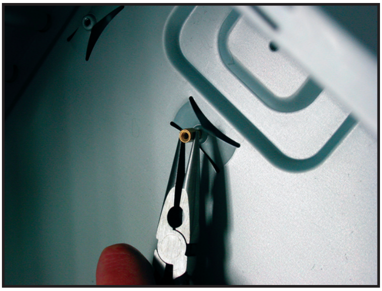
1.4 การติดตั้งเมนบอร์ด

1. พอร์ต I/O จะแตกต่างกันไปในเมนบอร์ดแต่ละอัน ใช้และติดตั้งตัวป้องกัน I/O ด้านหลังที่อยู่ในบรรจุภัณฑ์ของเมนบอร์ดเท่านั้น

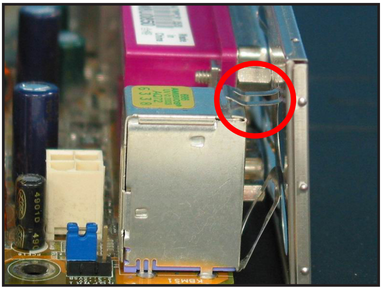


ขอบและปลายที่แหลมอาจทำให้เกิดการบาดเจ็บต่อร่างกาย
เราแนะนำให้คุณใส่ถุงมือป้องกันการบาด
ก่อนที่จะติดตั้งตัวป้องกัน I/O

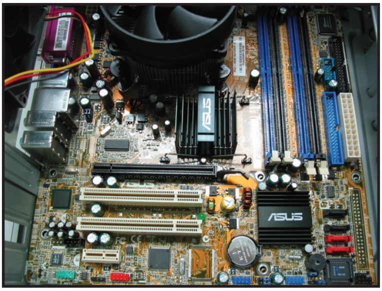
2. ติดตั้งแท่นวางแต่ละอันให้ตรงกับรูสกรูบนแผ่นโลหะ



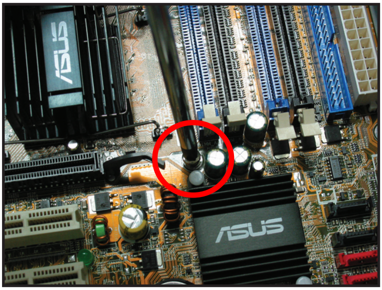
3. สปริงของขอบป้องกัน I/O อาจทำให้พอร์ต I/O เสียหายได้ ใช้ความระมัดระวังเมื่อติดตั้งตัวป้องกัน I/O



4. จัดตำแหน่งโดยให้ด้านที่มี I/O ของเมนบอร์ดหันไปทางด้านหลังของตัวเครื่อง และวางเมนบอร์ดลงในตัวเครื่อง



5. ใส่ และขันสกรูแต่ละตัวหลวมๆ ในทิศทางทแยงมุม ก่อนหลังจากใส่สกรูทั้งหมดแล้ว ให้ขันสกรูให้แน่น



- คุณสามารถนำฝาปิดสล็อตโลหะสำหรับเอ็กซ์แพนชั่นการ์ดที่ด้านหลังของตัวเครื่องออกก่อนที่จะติดตั้งเมนบอร์ดได สำหรับตัวเครื่องบางรุ่น การนำฝาปิดเอ็กซ์แพนชั่นสล็อตออกหลังจากการติดตั้งอาจทำได้ยาก
- อย่าไขสกรูให้แน่นเกินไป การทำเช่นนั้นอาจทำให้เมนบอร์ดเสียหายได

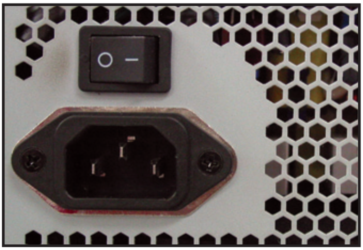
1.5 การติดตั้งชุดเพาเวอร์ซัพพลาย

มีชุดเพาเวอร์ซัพพลายที่ใช้กันอย่างกว้างขวาง 2 ชนิด ชนิดแรกเป็นการแก้ไของค์ประกอบด้านพลังงาน (PFC) แบบแอกทีฟ และอีกชนิดเป็น PFC แบบพาสซีฟ

1. เลือกชุดเพาเวอร์ซัพพลาย

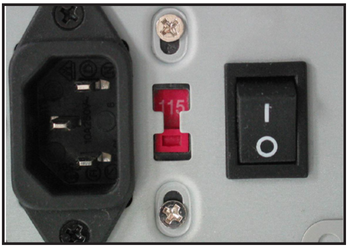
เพาเวอร์ซัพพลายที่มี PFC แบบแอกทีฟ:

PFC แบบแอกทีฟ จะแก้ไขแรงดันไฟฟ้า AC ขาเข้าให้โดย อัตโนมัติ

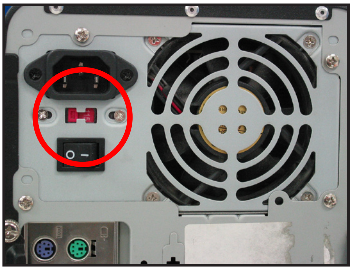


เพาเวอร์ซัพพลายที่มี PFC แบบพาสซีฟ:

PFC แบบพาสซีฟ จำเป็นต้องให้ผู้ใช้ปรับแรงดันไฟฟ้า AC ขาเข้า ด้วยตัวเอง



2. ถ้าคุณใช้เพาเวอร์ซัพพลายที่เป็น PFC แบบพาสซีฟ ให้ปรับแรงดันไฟฟ้า AC ขาเข้า เป็นค่าที่ถูกต้องในประเทศของคุณ



การไม่ปรับเพาเวอร์ซัพพลายเป็นแรงดันไฟฟ้า AC ที่ถูกต้อง จะ
ทำให้เกิดความเสียหายอย่างรุนแรงต่อระบบ

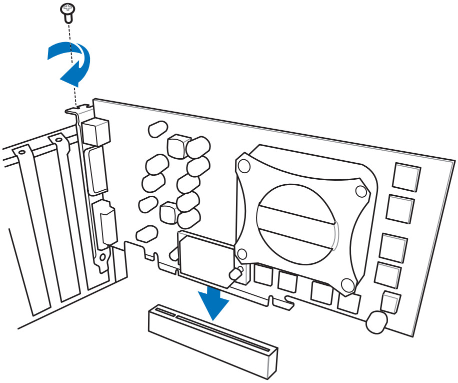
ใช้ชุดเพาเวอร์ซัพพลายที่มีใบรับรองด้านความปลอดภัยเท่านั้น การใช้ชุดเพาเวอร์ซัพพลายที่ไม่มีเสถียรภาพสามารถ ทำให้เมนบอร์ดและองค์ประกอบอื่นๆ ของคุณเสียหายได
สำหรับชุดเพาเวอร์ซัพพลายที่ตรงตามความต้องการของระบบ ให้ดูจากคู่มือผู้ใช้

1.6 การติดตั้งเอ็กซ์แพนชั่นการ์ด

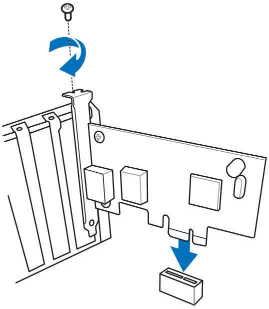
ในการติดตั้งเอ็กซ์แพนชั่นการ์ด:

1. ถอดฝาสล็อตโลหะตรงข้ามกับเอ็กซ์แพนชั่นการ์ด ซึ่งคุณต้องการติดตั้งเอ็กซ์แพนชั่นการ์ด
2. ติดตั้งเอ็กซ์แพนชั่นการ์ด และตรวจดูให้แน่ใจว่าเสียบลงในสล็อตอย่างเหมาะสม
3. ไขสกรูเพื่อยึดการ์ดลงบนสล็อต
4. ทำซ้ำขั้นตอนก่อนหน้านี้ เพื่อติดตั้งเอ็กซ์แพนชั่นการ์ดอื่น

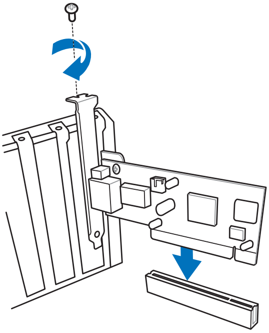
PCIE x16 การ์ด



PCIE x1 การ์ด



PCI การ์ด

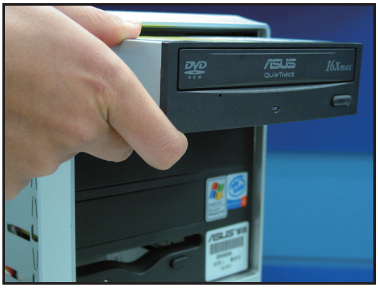


- สำหรับรายละเอียดในการตั้งค่าคอนฟิเกอเรชั่นการ์ด ให้อ่านเอกสารของการ์ด และดูคู่มือผู้ใช้เมนบอร์ดในกรณีที่คุณ จำเป็นต้องตั้งค่าคอนฟิกจัมเปอร์ใดๆ หลังจากการติดตั้งเอ็กซ์แพนชั่นการ์ด
- อ่านคู่มือผู้ใช้เมนบอร์ด สำหรับขั้นตอนในการเชื่อมต่อสายเคเบิลสัญญาณของเอ็กซ์แพนชั่นการ์ด

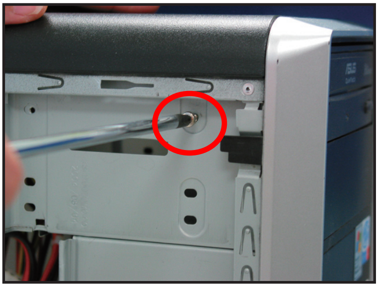
1.7 การติดตั้งดิสก์ไดรฟ์

1.7.1 ออปติคัลดิสก์ไดรฟ์ PATA

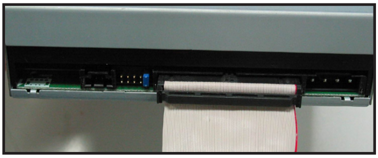
1. แกะฝาพลาสติกออก และเลื่อนออปติคัลไดรฟ์เข้าไปในช่อง



2. จัดไดรฟ์ให้ตรงกับรูสกร และยึดดิสก์ไดรฟ์ด้วยสกร

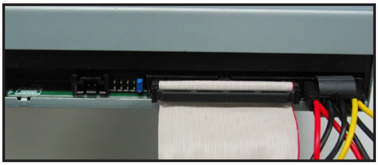


3. จัดทิศทาง และเสียบปลั๊กสายเคเบิล IDE เข้ากับออปติคัล ไดรฟ แถบสีแดงบนสายเคเบิล IDE คือพิน 1 และต้องเสียบให้ตรงกับด้านที่มีเครื่องหมายเป็นพิน 1 บนออปติคัลไดรฟ์

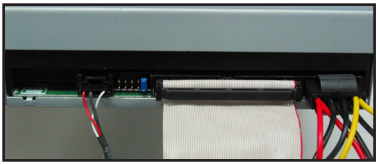


สายเคเบิล IDE มีการป้องกันการเสียบผิดด้าน อย่าใช้แรงดันสายเคเบิล IDE เข้าไปในขั้วต่อ

4. เชื่อมต่อสายเพาเวอร์ 4 พิน เข้ากับออปติคัลไดรฟ์

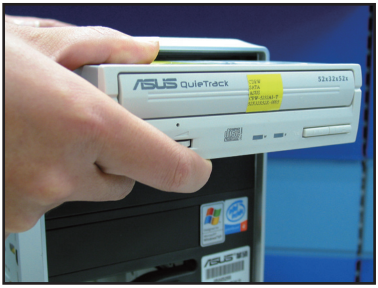


5. ต่อสายเคเบิลเสียงเข้ากับขั้วต่อบนออปติคัล ไดรฟ

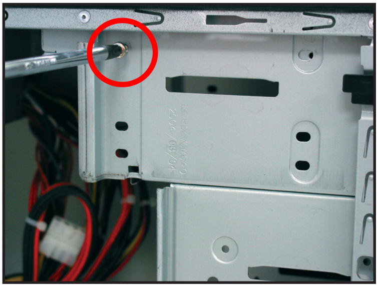


1.7.2 ออปติคัลดิสก์ไดรฟ์ SATA

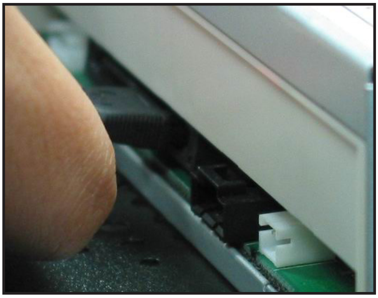
1. แกะฝาพลาสติกออก และเลื่อนออปติคัลไดรฟ์เข้าไปในช่อง



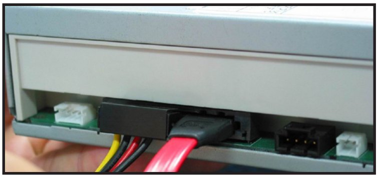
2. จัดไดรฟ์ให้ตรงกับรูสกรู และยึดดิสก์ไดรฟ์ด้วยสกรู



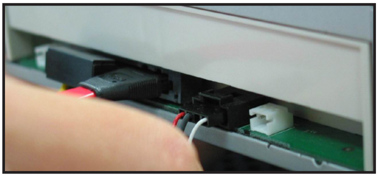
3. จัดทิศทาง และเสียบปลั๊กสายเคเบิล SATA เข้ากับออปติคัลไดรฟ์ สายเคเบิล SATA
มีการป้องกันการเสียบ ผิดด้าน
อย่าใช้แรงดันสายเคเบิล SATA เข้าไปในขั้วต่อ



4. เชื่อมต่อสายเพาเวอร์ SATA เข้ากับออปติคัลไดรฟ

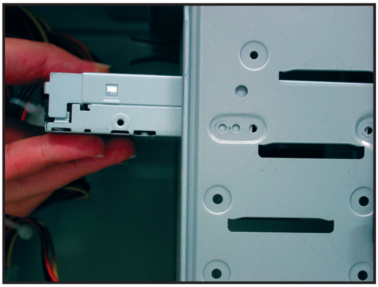


5. ต่อสายเคเบิลเสียงเข้ากับขั้วต่อบนออปติคัลไดรฟ

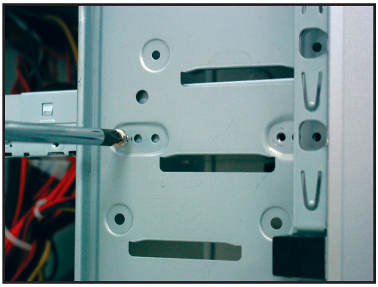


1.7.3 ฟล็อปปี้ดิสก์ไดรฟ

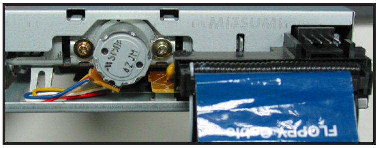
1. แกะฝาพลาสติกออก
และใส่ฟล็อปปี้ดิสก์ไดรฟ์เข้าไป ในช่อง



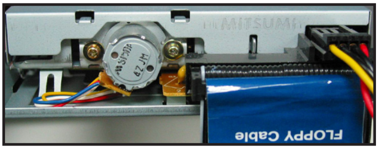
2. จัดไดรฟ์ให้ตรงกับรูสกรู
และยึดดิสก์ไดรฟ์ด้วยสกรู



3. จัดทิศทาง และเสียบสายอินเตอร์เฟสของฟล็อปปี้เข้า
กับฟล็อปปี้ดิสก์ไดรฟ์ แถบสีแดงบนสายเคเบิลคือพิน 1
และต้องเสียบให้ตรงกับด้านที่มีเครื่องหมายเป็นพิน 1
บนฟล็อปปี้ดิสก์ไดรฟ

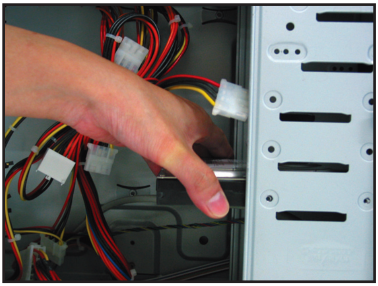

MITSUMI
FLOPPY Cable

4. เชื่อมต่อสายเคเบิลฟล็อปปี้เข้ากับขั้วต่อ
ที่ด้านหลัง ของฟล็อปปี้ดิสก์ไดรฟ์

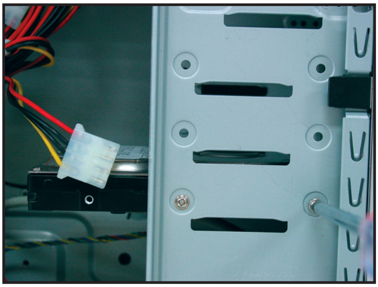

MITSUMI
FLOPPY Cable

1.7.4 ฮาร์ดดิสก์ไดรฟ์ PATA

1. ใส่ฮาร์ดดิสก์ไดรฟ์ PATA ลงในช่อง



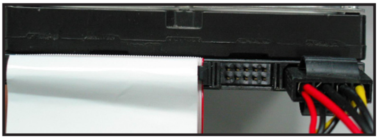
2. จัดไดรฟ์ให้ตรงกับรูสกรู และยึดดิสก์ไดรฟ์ด้วยสกรู



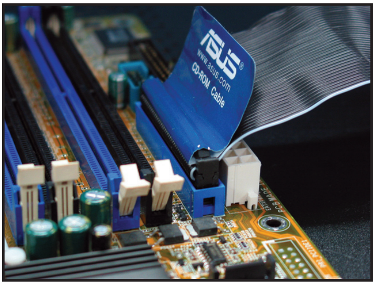
3. จัดทิศทาง และเชื่อมต่อสายเคเบิลสัญญาณเข้ากับฮาร์ดดิสก์ไดรฟ์ แถบสีแดงบนสายเคเบิลคือด้านพิน 1 จับคู่ให้ตรงด้านที่มีรอยบากป้องกัน และอย่าใช้แรงกด สายเคเบิลเข้าไปในขั้วต่อ

Silicon Image
SATALink™
CB23

4. เชื่อมต่อสายเคเบิลเพาเวอร์ 4 พินเข้ากับขั้วต่อ ท ด้านหลังของฮาร์ดดิสก์ไดรฟ



5. เชื่อมต่อปลายอีกด้านหนึ่งของสายเคเบิลสัญญาณไปยังสล็อตที่สัมพันธ์กันบนเมนบอร์ด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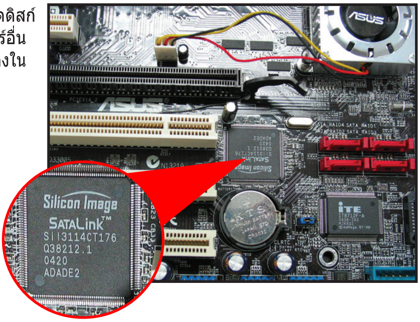
หมายเหตุสำหรับการติดตั้งฮาร์ดดิสก์ไดรฟ์ PATA

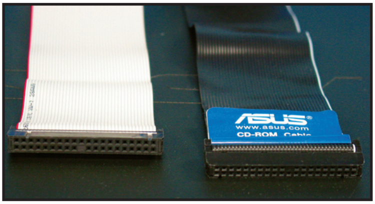
- ถ้าระบบปฏิบัติการของคุณถูกติดตั้งลงในฮาร์ดดิสก์ไดรฟ์ที่ควบคุมด้วย RAID หรือคอนโทรลเลอร์อื่นแรก สุด คุณต้องติดตั้งไดรเวอร์คอนโทรลเลอร์ลงในฮาร์ดดิสก์ก่อน


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

- สายเคเบิลได้รับการออกแบบมาให้มีลิ้นสำหรับดึง เพียงติดตั้งดิสก์ไดรฟ์ง่ายๆ ตามฉลากของสายเคเบิล เพื่อป้องกันความเสียหายกับพิน เมื่อต้องการถอดสายเคเบิล ให้ดึงที่ลิ้นของสายเคเบิล

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

- มีสายเคเบิลสองแบบสำหรับดิสก์ไดรฟ์ ATA IDE คือสายเคเบิล 0-wire (ขวา) แบบใหม่ และสายเคเบิล 40-wire (ซ้าย) แบบเก่า สำหรับดิสก์ไดรฟ ATA66/100/133 เฉพาะสายเคเบิลแบบ 0-wire ท สามารถให้สมรรถนะที่ดีกว่า โดยปกติ สายเคเบิล 40-wire จะใช้สำหรับออปติคัลไดรฟ์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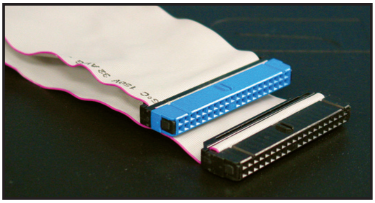
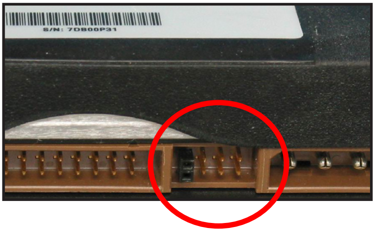
www.asus.com
CD-ROM Cable

- ขั้วต่อสายเคเบิลมีรหัสสีระบุอยู่ ขั้วต่อสีฟ้า ใช้สำหรับขั้วต่อโฮสต์ และขั้วต่อสีดำ/เทา ใช้สำหรับดิสก์ไดรฟ์หลัก/รอง

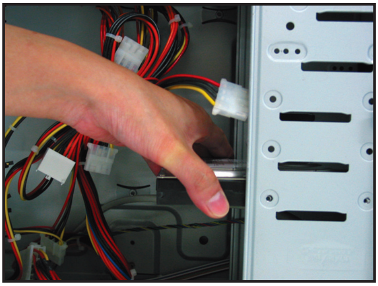


- เมื่อเชื่อมต่ออุปกรณ์ IDE สองตัว คุณต้องตั้งค่าจัมเปอร์ในตำแหน่งที่แตกต่างกัน โดยกำหนดให้ตัวหนึ่งเป็นมาสเตอร์ และอีกตัวหนึ่งเป็นสลาฟ ถ้าคุณใช้สายเคเบิล 80-wire คุณสามารถใช้รูปแบบการเลือกด้วยสายเคเบิลได้

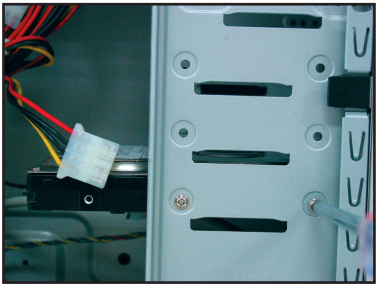

S/N: 7DB00P31

1.7.5 ฮาร์ดดิสก์ไดรฟ์ SATA

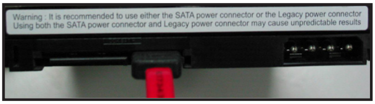
1. ใส่ฮาร์ดดิสก์ไดรฟ์ SATA ลงในช่อง



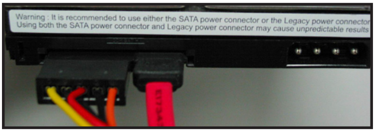
2. จัดไดรฟ์ให้ตรงกับรูสกรู และยึดดิสก์ไดรฟ์ด้วยสกรู



3. จัดทิศทาง และเชื่อมต่อสายเคเบิล SATA เข้ากับฮาร์ดดิสก์ไดรฟ์ สายเคเบิลสามารถใส่ได้ในทิศทางเดียวเท่านั้น

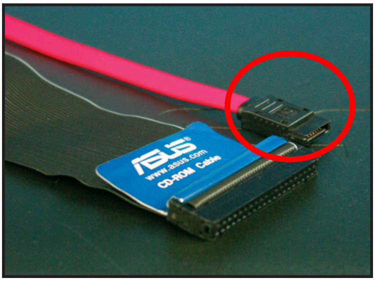

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

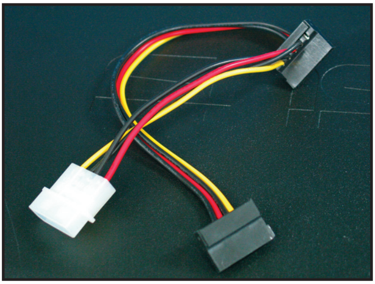
4. เชื่อมต่อสายเคเบิลเพาเวอร์ SATA เข้ากับขั้วต่อ ที่ด้านหลังของฮาร์ดดิสก์ไดรฟ


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

หมายเหตุสำหรับการติดตั้งฮาร์ดดิสก์ไดรฟ์ SATA

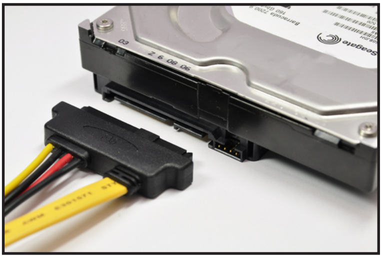
- อินเตอร์เฟซ ซีเรียล ATA (SATA) ให้ความเร็วในการ รับส่งข้อมูลสูงกว่า และมีความทนทานต่อแรงดันไฟฟ้าดีกว่า นอกจากนี้ ดีไซน์ที่แคบของสายเคเบิล SATA ยังช่วย แก้ปัญหาเรื่องต่างๆ เกี่ยวกับสายเคเบิล และช่วยให้การไหลเวียนอากาศในตัวเครื่องดีขึ้นอีกด้วย
- ขั้วต่อสายเคเบิลเพาเวอร์ SATA นั้นแตกต่างจากขั้วต่อ เพาเวอร์ 4 พินแบบดั้งเดิม เมนบอร์ดของ ASUS ให้สาย เคเบิลสำหรับแปลงมา ในกรณีที่ชุดเพาเวอร์ซัพพลายไม่ได้ให้ขั้วต่อชนิดใหม่นี้มา


www.asus.com
CD-ROM Cable

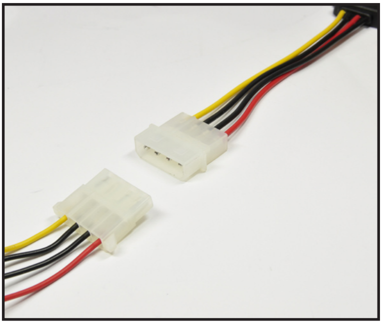


1.7.6 ฮาร์ดดิสก์ไดรฟ์ SAS

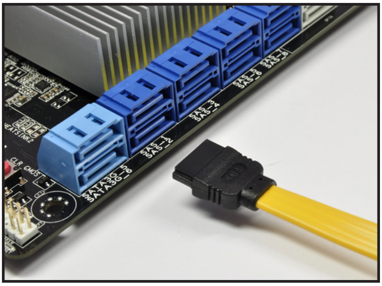
1. จัดทิศทาง และเชื่อมต่อสายเคเบิลสัญญาณคอมโบ SAS / เพาเวอร์เข้ากับฮาร์ดดิสก์ไดรฟ์ สายเคเบิลเท่านั้นที่สามารถพอดีในทิศทางเดียว



2. เชื่อมต่อสายเคเบิลเพาเวอร์ SAS ไปยังขั้วต่อเพาเวอร์บนส่วนเพาเวอร์ซัพพลาย



3. เชื่อมต่อสายเคเบิลสัญญาณ SAS ไปยังขั้วต่อ SASบนเมนบอร์ด

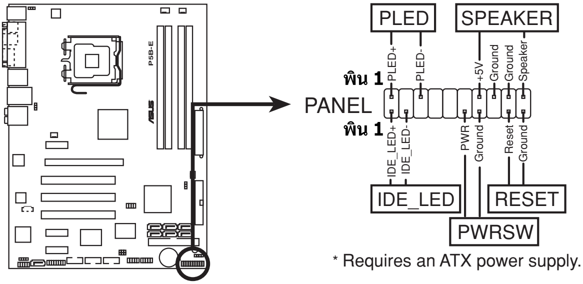


1.8 สายเคเบิลที่แผงด้านหน้า

ในการเชื่อมต่อสายเคเบิลที่แผงด้านหน้า:

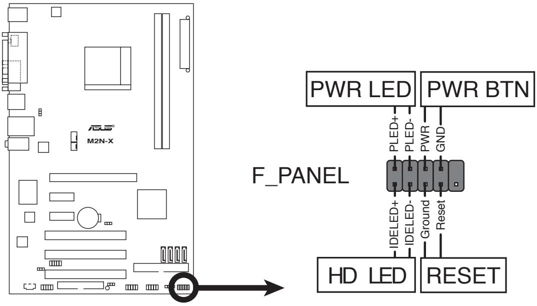
- RESET (สวิตช์รีเซ็ต)
- PLED (LED เพาเวอร์)
- PWRSW (สวิตช์เพาเวอร์)
- IDE_LED (LED แสดงการทำงานของฮาร์ดดิสก์ IDE)
- ลำโพง (ขั้วต่อลำโพง)

ขั้วต่อที่แผงด้านหน้า 20-8 พิน


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
พิน 1
PANEL
พิน 1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

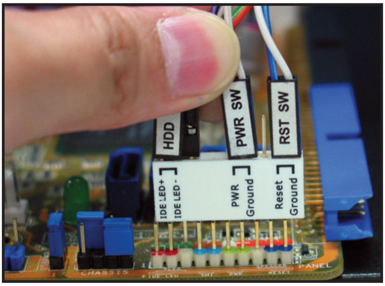
ขั้วต่อที่แผงด้านหน้า 10-1 พิน


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- สายเคเบิลที่แผงด้านหน้าของตัวเครื่องของคุณ อาจแตกต่างไปตามรุ่นและดีไซน์ของตัวเครื่อง เชื่อมต่อสายเคเบิล เหล่านี้เข้ากับเมนบอร์ด ตามฉลากที่ระบุไว
- ถ้าไฟ LED ไม่ติดขึ้น ในขณะที่ตำแหน่งของพินนั้นถูกต้อง คุณอาจเสียบพินของสายดินสลับกับพินของสายสัญญาณ โดยทั่วไป สายสีขาวหมายถึงพินสายดิน และสายที่มีรหัสสี ใช้สำหรับพินสัญญาณ
- สายเคเบิลแผงด้านหน้า SPEAKER, RESET และ PWRSW ไม่มีการระบุทิศทางที่แน่นอน ในขณะที่สายเคเบิล IDE_LED และ PLED จำเป็นต้องใส่ทิศทางให้ถูกต้อง ให้เชื่อมต่อสายเคเบิล PIN1 เข้ากับขั้วต่อ PIN1 บน เมนบอร์ด
- ขั้วต่อที่แผงด้านหน้าจะแตกต่างกันไปตามรุ่นเมนบอร์ดของคุณ สำหรับข้อมูลเพิ่มเติม ให้อ่านคู่มือผู้ใช้

ขั้วต่อ ASUS Q-Connector

การติดตั้งด้วยขั้วต่อ ASUS Q-Connector ในขั้นตอนเดียว จะช่วยคุณ ประหยัดเวลา และลดความยุ่งยากกับสายเคเบิลที่แผงด้านหน้า ให้ดูคู่มือผู้ใช้ สำหรับรายละเอียด

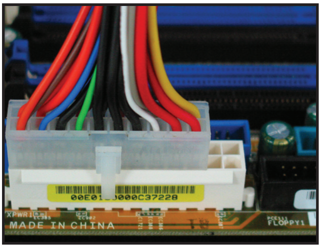


ขั้วต่อ Q-connector มีให้ในเครื่องบางรุ่น ให้ดูคู่มือผู้ใช้สำหรับรายละเอียด

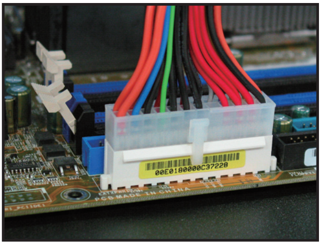
1.9 การเชื่อมต่อ ATX เพาเวอร์

ขั้วต่อ ATX เพาเวอร์สามารถใส่ได้ในทิศทางเดียว ใช้คลิปด้านข้าง เพื่อเกี่ยวขั้วต่อเข้ากับเมนบอร์ด อย่าใช้แรงบังคับ ขั้วต่อตัวผู้ลงในช่องเสียบตัวเมียบนเมนบอร์ด โดยปกต จะมีขั้วต่อสองอันบนเมนบอร์ด นั่นคือขั้วต่อ 24 พิน และ 4 พิน ชุดเพาเวอร์ซัพพลายแบบเก่าบางรุ่น อาจมีเฉพาะขั้วต่อเพาเวอร 20 พิน ซึ่งใช้เสียบขั้วต่อเพาเวอร์ 24 พินบนเมนบอร์ด ได้พอดี

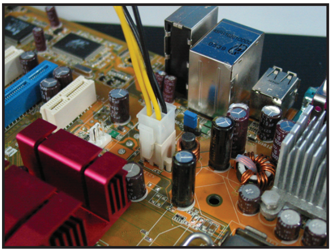
ขั้วต่อเพาเวอร์ 24 พิน



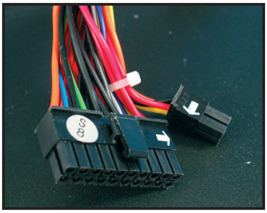
**ขั้วต่อเพาเวอร์ 20 พิน
(เสียบบนขั้วต่อตัวเมีย 24 พิน)**

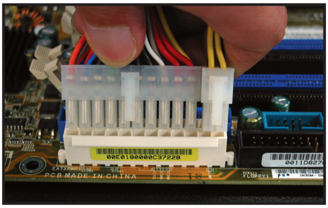


ขั้วต่อเพาเวอร์ 4 พิน



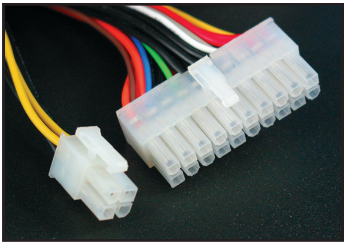
- อย่าต่อไฟฟ้า AC จากภายนอก ในขณะที่กำลังเชื่อมต่อขั้วต่อเพาเวอร์เข้ากับเมนบอร์ด
- ตรวจดูให้แน่ใจว่าขั้วต่อเพาเวอร์ยึดกับเมนบอร์ดอย่างแน่นหนา
- ถ้าเพาเวอร์ซัพพลายของคุณสนับสนุนขั้วต่อ 20 พิน + 4 พิน, คุณสามารถใช้งานขั้วต่อทั้งสองแบบน และติดตั้งไป ยังขั้วต่อ 24 พินบนเมนบอร์ด



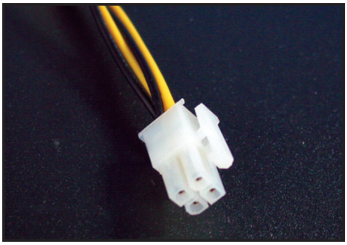


ขั้วต่อเพาเวอร์

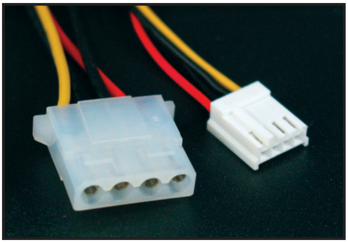
ขั้วต่อ ATX 20+4 (24) พิน



ขั้วต่อ ATX 4 พิน

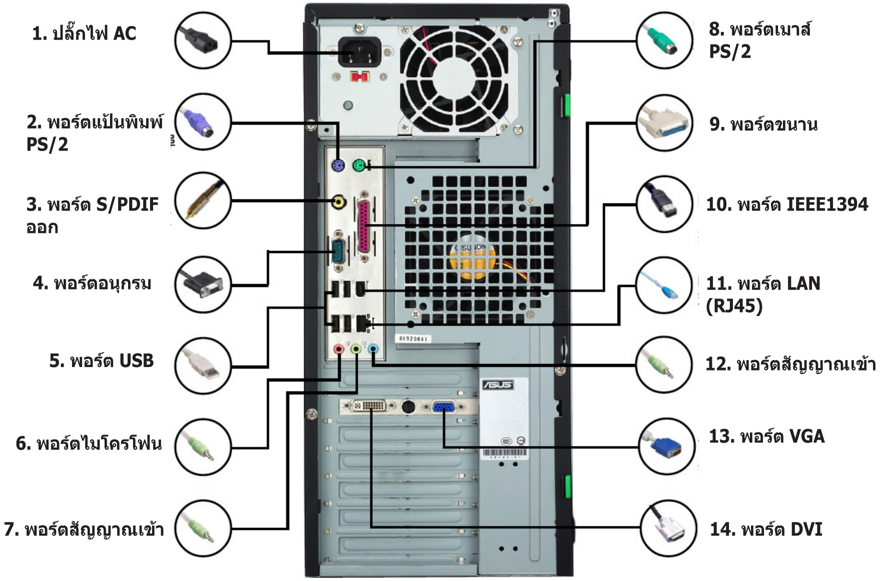


ขั้วต่อเพาเวอร์อุปกรณ์ต่อพ่วง (ซ้าย) ขั้วต่อ เพาเวอร์ฟล็อปปี้ (ขวา)



1.10 อุปกรณ์ต่อพ่วง และอุปกรณ์เสริม

ดูรูปด้านล่าง เพื่อเชื่อมต่ออุปกรณ์ต่อพ่วง และอุปกรณ์เสริม


1. ปลั๊กไฟ AC
2. พอร์ตแป้นพิมพ์ PS/2
3. พอร์ต S/PDIF ออก
4. พอร์ตอนุกรม
5. พอร์ต USB
6. พอร์ตไมโครโฟน
7. พอร์ตสัญญาณเข้า
8. พอร์ตเมาส์ PS/2
9. พอร์ตขนาน
10. พอร์ต IEEE1394
11. พอร์ต LAN (RJ45)
12. พอร์ตสัญญาณเข้า
13. พอร์ต VGA
14. พอร์ต DVI

1. ปลั๊กไฟ AC + สายเชื่อมต่อ

2. พอร์ตแป้นพิมพ์ PS/2 + แป้นพิมพ์

3. พอร์ต S/PDIF ออก + ระบบลำโพง ดิจิตอล 5.1

4. พอร์ตอนุกรม + แท่นวาง PDA

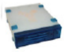
5. พอร์ต USB + อุปกรณ์ USB

6. พอร์ตไมโครโฟน + ไมโครโฟน

7. พอร์ตสัญญาณออก + ลำโพง

8. พอร์ตเมาส์ PS/2 + เมาส์

9. พอร์ตขนาน + เครื่องพิมพ์

10. พอร์ต IEEE1394 + ฮาร์ดดิสก์ไดรฟ์ ภายนอก


11. พอร์ต LAN (RJ45) + โมเด็ม

12. พอร์ตสัญญาณเข้า + เครื่องบันทึก

13. พอร์ต VGA + จอภาพ CRT

14. พอร์ต DVI + จอภาพ LCD

ขั้วต่อแผงด้านหลังแตกต่างกันในรุ่นต่างๆ ให้ดูคู่มือผู้ใช้สำหรับรายละเอียด

1.11 การเริ่มต้นใช้งานในครั้งแรก

ระบบจะรันการทดสอบตัวเองเมื่อเปิดเครื่อง หรือ POST ในขณะที่การทดสอบกำลังรันอยู่, BIOS จะส่งเสียงบี๊ป (ดูรหัส บี๊ปของ BIOS ที่ตารางด้านล่าง)

การบี๊ปของ BIOS	**คำอธิบาย**
เสียงบี๊ปต่อเนื่องหนึ่งครั้ง ตามด้วยเสียงบี๊ปสั้น 3 ครั้ง	ไม่พบ VGA
เสียงบี๊ปต่อเนื่องหนึ่งครั้ง ตามด้วยเสียงบี๊ปสั้น 2 ครั้ง จากนั้นหยุดครู่หนึ่ง (ซ้ำ)	ไม่พบหน่วยความจำ
เสียงบี๊ปต่อเนื่องหนึ่งครั้ง ตามด้วยเสียงบี๊ปสั้น 4 ครั้ง	องค์ประกอบฮาร์ดแวร์ล้มเหลว (AMI BIOS)
เสียงบี๊ปสั้น 4 ครั้ง	องค์ประกอบฮาร์ดแวร์ล้มเหลว (AWARD BIOS)

การแก้ไขปัญหา

ปัญหา	**การดำเนินการ**
• ไม่สามารถเปิดคอมพิวเตอร์ได • ไฟ LED เพาเวอร์ไม่ติด • พัดลมเพาเวอร์ซัพพลายไม่ทำงาน	ตรวจดูให้แน่ใจว่าสายเพาเวอร์เชื่อมต่ออย่างถูกต้อง
คอมพิวเตอร์เปิดอยู่ แต่จอภาพเป็นสีดำ	• ตรวจดูให้แน่ใจว่าเปิดจอภาพอยู่ และสายเคเบิล VGA เชื่อมต่ออย่าง ถูกต้อง • ปรับความสว่าง และความคมชัดของจอภาพ • ปิดคอมพิวเตอร์ และถอดสายเพาเวอร์ออก ตรวจสอบว่าการ์ด VGA ติดตั้งแน่นหนาหรือไม
ไม่พบหน่วยความจำ	• ตรวจดูให้แน่ใจว่าโมดูลหน่วยความจำถูกต้อง • ตรวจดูให้แน่ใจว่า DIMMS เสียบอย่างแน่นหนาในซ็อกเก็ต DIMM • ตรวจดูให้แน่ใจว่าโมดูลหน่วยความจำ มาจากรายการผู้จำหน่ายที่ได้รับการรับรอง ดูคู่มือผู้ใช้สำหรับ QVL
ฟล็อปปี้ผิดพลาด (ไฟแสดงสถานะติด ตลอด หรือมีข้อความผิดพลาดแสดงขึ้นบนหน้าจอ)	• ตรวจสอบค่าคอนฟิเกอเรชั่น BIOS เกี่ยวกับฟล็อปปี้ดิสก์ไดรฟ์ • ตรวจดูให้แน่ใจว่าสายเคเบิลสำหรับฟล็อปปี้ดิสก์ไดรฟ์ เสียบอย่างถูกต้อง
ฮาร์ดดิสก์/ออปติคัลดิสก์ไดรฟ์ผิดพลาด (ไม่รู้จัก หรือตรวจไม่พบ)	• ตรวจดูให้แน่ใจว่าการตั้งค่าจัมเปอร์ถูกต้อง (มาสเตอร์/สลาฟ) • ตรวจสอบค่าคอนฟิเกอเรชั่น BIOS เกี่ยวกับฮาร์ดดิสก์/ออปติคัลดิสก ไดรฟ์ • ตรวจดูให้แน่ใจว่าสายเคเบิลอุปกรณ์ต่ออยู่อย่างแน่นหนา • ตรวจดูให้แน่ใจว่าติดตั้งไดรเวอร์อุปกรณ์แล้ว

บทที่ 2: จัดการ/อัปเดต BIOS

2.1 ยูทิลิตี้ AFUDOS

ยูทิลิตี้ AFUDOS อนุญาตให้คุณอัปเดต BIOS ในสภาพแวดล้อมแบบ DOS โดยใช้ฟล็อปปี้ดิสก์ที่บูตได้ ซึ่งบรรจุไฟล์ BIOS ที่อัปเดตไว้ นอกจากนี้ ยูทิลิตี้นี้ยังอนุญาตให้คุณคัดลอกไฟล์ BIOS ปัจจุบันเก็บไว้ ซึ่งคุณสามารถใช้เป็นข้อมูล สำรอง เมื่อ BIOS ทำงานล้มเหลว หรือเสียระหว่างกระบวนการอัปเดต

การคัดลอก BIOS ปัจจุบัน

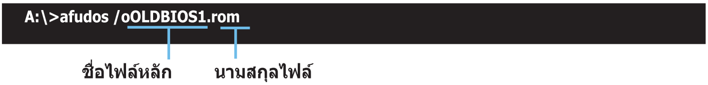
ในการคัดลอกไฟล์ BIOS ปัจจุบันโดยใช้ยูทิลิตี้ AFUDOS:

- ตรวจดูให้แน่ใจว่าฟล็อปปี้ดิสก์ไม่ได้มีการป้องกันการเขียน และมีพื้นที่ว่างอย่างน้อย 1024KB เพื่อ บันทึกไฟล
- หน้าจอ BIOS สำเร็จมีไว้สำหรับการอ้างอิงเท่านั้น หน้าจอ BIOS ที่แท้จริง อาจไม่เหมือนที่แสดง

1. คัดลอกยูทิลิตี้ AFUDOS (afudos.exe) จากแผ่น DVD สนับสนุนของเมนบอร์ด ไปยังฟล็อปปี้ดิสก์ที่สามารถบูตได ซึ่งคุณสร้างไว้ก่อนหน้านี้
2. บูตระบบในโหมด DOS, จากนั้น ที่พร็อมต์ให้พิมพ์:

   afudos /o[ชื่อไฟล์]

   เมื่อ [ชื่อไฟล์] คือชื่อไฟล์ที่กำหนดโดยผู้ใช้ ซึ่งมีความยาวไม่เกิน 8 ตัวอักษรสำหรับชื่อไฟล์หลัก และอีก 3 ตัวอักษรสำหรับนามสกุลของไฟล



```
A:\>afudos /oOLDBIOS1.rom
```

3. กด <Enter> ยูทิลิตี้จะคัดลอกไฟล์ BIOS ปัจจุบันไปยังฟล็อปปี้ดิสก์

```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

ยูทิลิตี้จะกลับไปยัง DOS พร็อมต์หลังจากที่คัดลอกไฟล์ BIOS ปัจจุบันเสร็จ

การอัปเดตไฟล์ BIOS

ในการอัปเดตไฟล์ BIOS โดยใช้ยูทิลิตี้ AFUDOS:

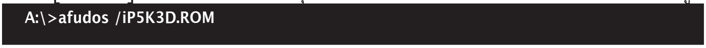
1. เข้าไปยังเว็บไซต์ ASUS (www.asus.com) และดาวน์โหลดไฟล์ BIOS ล่าสุดสำหรับเมนบอร์ด บันทึกไฟล์ BIOS ลงในฟล็อปปี้ดิสก์ที่สามารถบูตได

เขียนชื่อไฟล์ BIOS ไว้บนกระดาษ คุณจำเป็นต้องพิมพ์ชื่อไฟล์ BIOS ที่ถูกต้องที่ DOS พร็อมต์

2. คัดลอกยูทิลิตี้ AFUDOS (afudos.exe) จากแผ่น DVD สนับสนุนของเมนบอร์ด ไปยังฟล็อปปี้ดิสก์ที่สามารถบูตได้ ซึ่งคุณสร้างไว้ก่อนหน้านี้
3. บูตระบบในโหมด DOS, จากนั้น ที่พร็อมต์ให้พิมพ์:

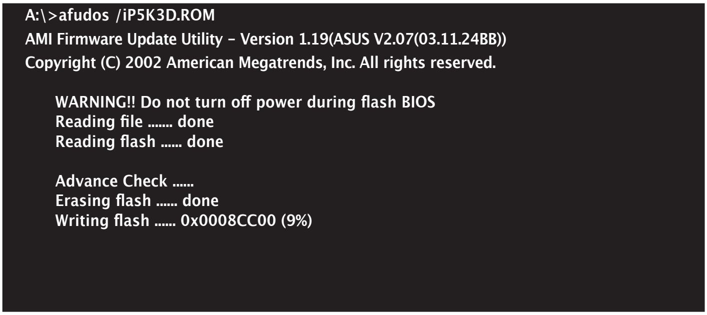
   afudos /i[ชื่อไฟล์]

   เมื่อ [ชื่อไฟล์] คือไฟล์ BIOS ล่าสุด หรือไฟล์ดั้งเดิมบนฟล็อปปี้ดิสก์ที่สามารถบูตได้



```
A:\>afudos /iP5K3D.ROM
```

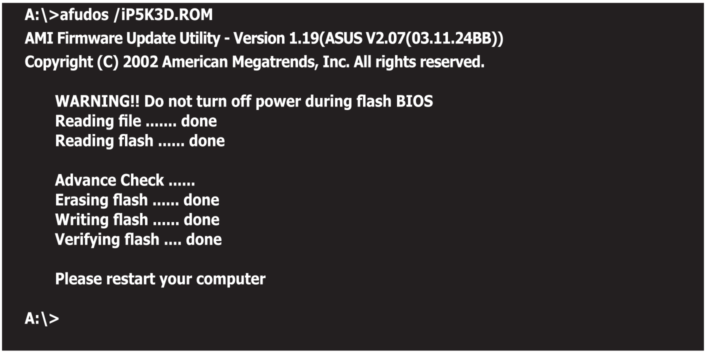
4. ยูทิลิตี้จะตรวจสอบไฟล์ และเริ่มการอัปเดต BIOS



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility – Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

อย่าปิด หรือรีเซ็ตระบบในขณะที่กำลังอัปเดต BIOS เพื่อป้องกันการบูตระบบล้มเหลว!

5. ยูทิลิตี้จะกลับไปยัง DOS พร็อมต์หลังจากกระบวนการอัปเดต BIOS เสร็จสมบูรณ์ บูตระบบใหม่จากฮาร์ดดิสก์ไดรฟ์



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 ยูทิลิตี้ Award BIOS Flash

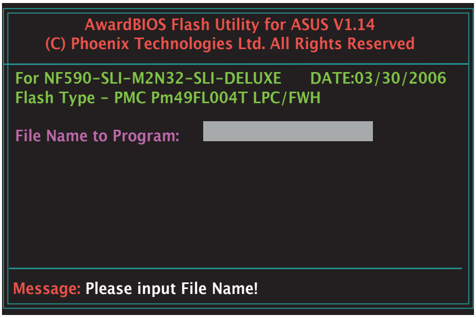
การอัปเดต BIOS

คุณสามารถอัปเดต BIOS (Basic Input/Output System) ได้โดยใช้ยูทิลิตี้ AwardBIOS Flash ปฏิบัติตามขั้นตอน เหล่านี้ เพื่ออัปเดต BIOS โดยใช้ยูทิลิตี้นี้

1. ดาวน์โหลดไฟล์ BIOS ล่าสุดจากเว็บไซต์ ASUS เปลี่ยนชื่อไฟล์เป็น M2N32SLI.BIN และบันทึกลงในฟล็อปปี้ ดิสก์, CD ROM หรือแฟลชดิสก์ USB ใน **รูปแบบ FAT 16/12**

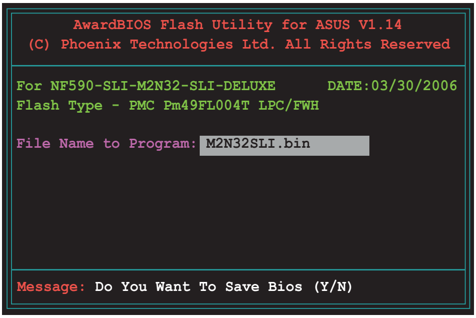
บันทึกเฉพาะไฟล์ BIOS ที่อัปเดตในดิสก์ เพื่อหลีกเลี่ยงการโหลดไฟล์ BIOS ผิด

2. คัดลอกยูทิลิตี้ AwardBIOS Flash (awdflash.exe) จากโฟลเดอร์ Software ของแผ่น CD สนับสนุนไปยังฟล็อปปี้ ดิสก์, CD ROM หรือแฟลชดิสก์ USB ที่มีไฟล์ BIOS ล่าสุด
3. บูตระบบในโหมด DOS โดยใช้ฟล็อปปี้ดิสก์, CD ROM หรือแฟลชดิสก์ USB ที่สามารถบูตได้ซึ่งคุณสร้างไว้ก่อน หน้า
4. ภายใต้โหมด DOS, ใช้ <X:> (X แทนชื่อของ การกำหนดดิสก์) เพื่อสลับไปยังโฟลเดอร ของฟล็อปปี้ดิสก์, CD ROM หรือแฟลชดิสก์ USB ที่คุณบันทึกไฟล์ BIOS และยูทิลิตี้ Award BIOS Flash ไว
5. ที่พร็อมต์, พิมพ์ awdflash จากนั้นกด <Enter> หน้าจอยูทิลิตี้ Award BIOS Flash จะปรากฏขึ้น



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

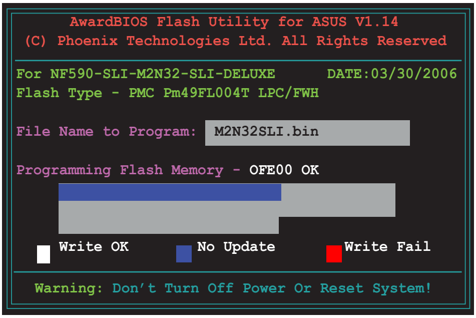
6. พิมพ์ชื่อไฟล์ BIOS ในฟิลด์ File Name to Program (ชื่อไฟล์ที่จะโปรแกรม), จากนั้นกด <Enter>



```
          AwardBIOS Flash Utility for ASUS V1.14
   (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. กด <N> เมื่อยูทิลิตี้บอกให้คุณบันทึกไฟล์ BIOS ปัจจุบัน หน้าจอต่อไปนี้จะปรากฏขึ้น

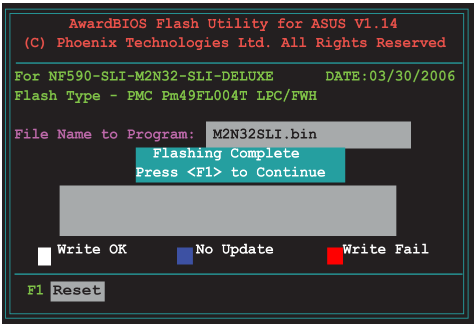
8. ยูทิลิตี้จะตรวจสอบไฟล์ BIOS ในฟล็อปปี้ดิสก์, CD ROM หรือแฟลชดิสก์ USB และเริ่มการแฟลชไฟล์ BIOS



```
          AwardBIOS Flash Utility for ASUS V1.14
   (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

   ⬜ Write OK       🟦 No Update       🟥 Write Fail

   Warning: Don't Turn Off Power Or Reset System!
```

อย่าปิด หรือรีเซ็ตระบบระหว่างกระบวนการแฟลช!

9. ยูทิลิตี้จะแสดงข้อความว่า การแฟลชสมบูรณ์ เป็นการระบุว่าคุณทำการแฟลชไฟล์ BIOS สำเร็จแล้ว นำแผ่นดิสก์ออก จากนั้นกด <F1> เพื่อเริ่มระบบ



```
          AwardBIOS Flash Utility for ASUS V1.14
   (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                   Flashing Complete
                 Press <F1> to Continue

   ⬜ Write OK       🟦 No Update       🟥 Write Fail

  F1 Reset
```

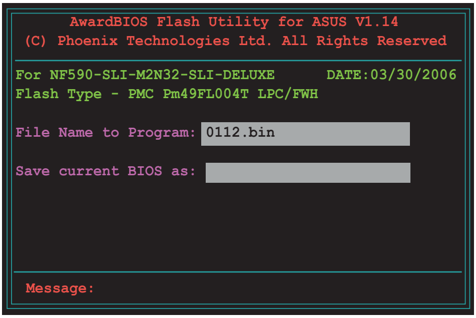
การบันทึกไฟล์ BIOS ปัจจุบัน

คุณสามารถใช้ยูทิลิตี้ AwardBIOS Flash เพื่อบันทึกไฟล์ BIOS ปัจจุบันได้ คุณสามารถโหลดไฟล์ BIOS ปัจจุบันกลับ เข้าไปในเมนบอร์ด ในกรณีที่ไฟล์ BIOS เสียหายระหว่างกระบวนการแฟลช

ตรวจดูให้แน่ใจว่าฟล็อปปี้ดิสก์, CD ROM หรือแฟลชดิสก์ USB มีพื้นที่เพียงพอในการบันทึกไฟล์

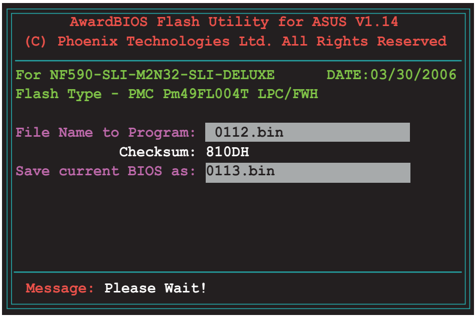
ในการบันทึกไฟล์ BIOS ปัจจุบันโดยใช้ยูทิลิตี้ AwardBIOS Flash:

1. ทำตามขั้นที่ 1 ถึง 6 ของส่วนก่อนหน้า
2. กด <Y> เมื่อยูทิลิตี้บอกให้คุณบันทึกไฟล์ BIOS ปัจจุบัน หน้าจอต่อไปนี้จะปรากฏขึ้น



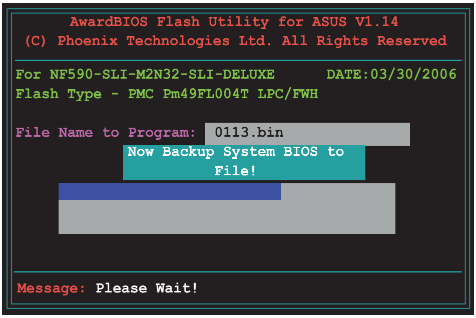
```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

 Message:
```

3. พิมพ์ชื่อไฟล์สำหรับไฟล์ BIOS ปัจจุบันในฟิลด Save current BIOS as (บันทึก BIOS ปัจจุบันเป็น), จากนั้นกด <Enter>



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
             Checksum: 810DH
Save current BIOS as: 0113.bin

 Message: Please Wait!
```

4. ยูทิลิตี้จะบันทึกไฟล์ BIOS ปัจจุบันไปยังดิสก์, จากนั้นกลับไปยังกระบวนการแฟลช BIOS



```
        AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
             Now Backup System BIOS to
                       File!

Message: Please Wait!
```

2.3 ยูทิลิตี้ ASUS Update

ยูทิลิตี้ ASUS Update เป็นยูทิลิตี้ที่อนุญาตให้คุณจัดการ บันทึก และอัปเดต BIOS ของเมนบอร์ดในสภาพแวดล้อมแบบ Windows® ยูทิลิตี้ ASUS Update อนุญาตให้คุณ:

- บันทึกไฟล์ BIOS ปัจจุบัน
- ดาวน์โหลดไฟล์ BIOS ล่าสุดจากอินเตอร์เน็ต
- อัปเดต BIOS จากไฟล์ BIOS ที่อัปเดต
- อัปเดต BIOS โดยตรงจากอินเตอร์เน็ต และ
- ดูข้อมูลเวอร์ชั่น BIOS

ยูทิลิตี้นี้มีอยู่ในแผ่น DVD สนับสนุนที่มาพร้อมกับบรรจุภัณฑ์เมนบอร์ด

ASUS Update จำเป็นต้องใช้การเชื่อมต่ออินเตอร์เน็ตผ่านเครือข่าย หรือผู้ให้บริการอินเตอร์เน็ต (ISP)

การติดตั้ง ASUS Update

ในการติดตั้ง ASUS Update:

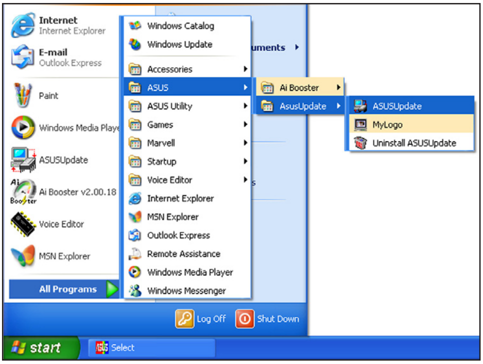
1. ใส่แผ่น DVD สนับสนุนลงในออปติคัลไดรฟ์ เมนู Drivers (ไดรเวอร์) จะปรากฏขึ้น
2. จากเมนู **Main** (หลัก) คลิกแท็บ Utilities (ยูทิลิตี้), จากนั้นคลิก Install ASUS Update VX.XX.XX (ติดตั้ง ASUS Update VX.XX.XX)
3. ยูทิลิตี้ ASUS Update จะถูกคัดลอกไปยังระบบของคุณ

การอัปเดต BIOS ผ่านอินเตอร์เน็ต

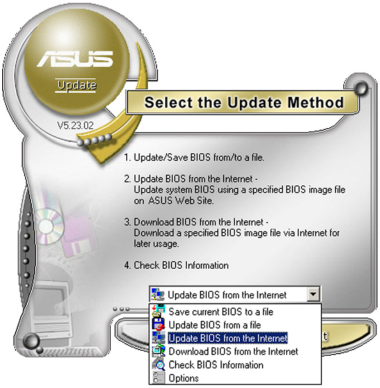
ออกจากแอปพลิเคชั่น Windows® ทั้งหมดก่อนที่คุณจะอัปเดต BIOS โดยใช้ยูทิลิตี้นี้

ในการอัปเดต BIOS ผ่านอินเตอร์เน็ต:

1. เปิดยูทิลิตี้ ASUS Update จากเดสก์ทอป Windows® โดยการคลิกที่ **Start (เริ่ม) > Programs (โปรแกรม) > ASUS > ASUSUpdate > ASUSUpdate** หน้าต่างหลักของ ASUS Update จะปรากฏขึ้น

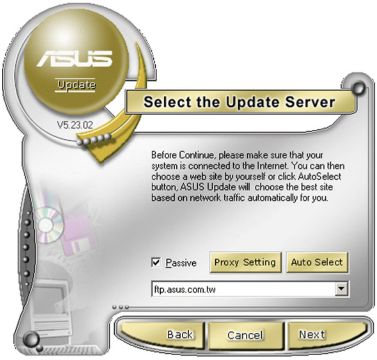

Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. เลือก **Update BIOS from the Internet** (อัปเดต BIOS จากอินเตอร์เน็ต) จากเมนูแบบดึงลง, จากนั้นคลิก **Next** (ถัดไป)


ASUS
Update
V5.23.02
Select the Update Method
1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

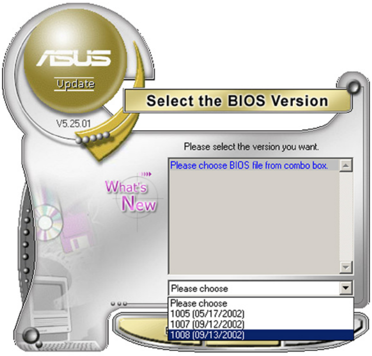
3. เลือกไซต์ FTP ของ ASUS ที่ใกล้คุณที่สุด เพื่อ หลีกเลี่ยงการจราจรบนเครือข่าย, หรือคลิก **Auto Select (เลือกอัตโนมัติ)** คลิก **Next (ถัดไป)**


ASUS
Update
V5.23.02
Select the Update Server
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw
Proxy Setting
Auto Select
Back
Cancel
Next

4. จากไซต์ FTP, เลือกเวอร์ชั่น BIOS ที่คุณต้องการดาวน์โหลด คลิก **Next (ถัดไป)**
5. ปฏิบัติตามขั้นตอนบนหน้าจอ เพื่อทำกระบวนการอัปเดตให้ สมบูรณ์


ASUS
Update
V5.25.01
Select the BIOS Version
What's New
Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

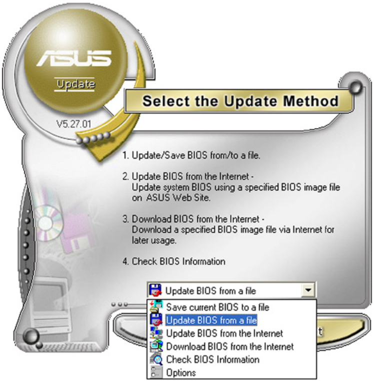
ยูทิลิตี้ ASUS Update มีความสามารถในการอัปเดตตัวเองผ่านอินเตอร์เน็ต ให้อัปเดต ยูทิลิตี้อยู่เสมอ เพื่อใช้ประโยชน์จาก คุณสมบัติทั้งหมด

การอัปเดต BIOS ผ่านไฟล์ BIOS

ในการอัปเดต BIOS ผ่านไฟล์ BIOS:

1. เปิดยูทิลิตี้ ASUS Update จากเดสก์ทอป Windows® โดยการคลิกที่ **Start (เริ่ม) > Programs (โปรแกรม) > ASUS > ASUSUpdate > ASUSUpdate** หน้าต่างหลักของ ASUS Update จะปรากฏขึ้น

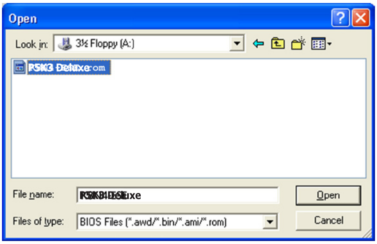
2. เลือก **Update BIOS from a file** (อัปเดต BIOS จากไฟล์) จากเมนูแบบดึงลง, จากนั้นคลิก **Next** (ถัดไป)


ASUS
Update
V5.27.01
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. ค้นหาไฟล์ BIOS จากหน้าต่าง Open (เปิด), จากนั้นคลิก **Open (เปิด)**
4. ปฏิบัติตามขั้นตอนบนหน้าจอ เพื่อทำกระบวนการอัปเดตให้ สมบูรณ์


Open
Look in:
P5K3 Deluxe
File name:
Files of type:
Open
Cancel

Look in: 3½ Floppy (A:)

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

ตรวจดูให้แน่ใจว่าได้โหลดการตั้งค่าเริ่มต้น BIOS เพื่อให้มั่นใจถึงความเข้ากันได้และเสถียรภาพของระบบ เลือกรายการ **Load Setup Defaults** (โหลดการตั้งค่าเริ่มต้น) ภายใต้เมนู **Exit** (ออก)

2.4 ASUS BIOS Updater

ASUS BIOS Updater อนุญาตให้คุณอัปเดต BIOS ในสภาพแวดล้อมของ DOS นอกจากนี้ ยูทิลิตี้นี้ยังอนุญาตให้คุณคัดลอกไฟล์ BIOS ปัจจุบันเก็บไว้ ซึ่งคุณสามารถใช้เป็นข้อมูลสำรอง เมื่อ BIOS ทำงานล้มเหลว หรือเสียระหว่างกระบวนการอัปเดต

หน้าจอยูทิลิตี้ต่อไปนี้ใช้สำหรับการอ้างอิงเท่านั้น หน้าจอยูทิลิตี้ที่แท้จริงอาจไม่เหมือนกับที่แสดง

ก่อนที่จะอัปเดต BIOS

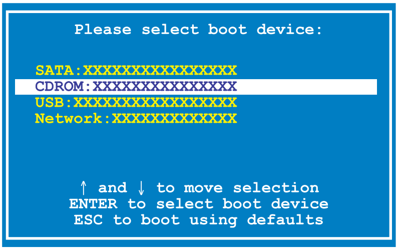
1. เตรียมแผ่น DVD สนับสนุนของเมนบอร์ด และ USB แฟลชไดรฟ์ในรูปแบบ FAT32/16 และเป็นพาร์ติชั่นเดียว
2. ดาวน์โหลดไฟล์ BIOS ล่าสุดและ BIOS Updater จากเว็บไซต์ ASUS ที่ http://support.asus.com จากนั้นจัดเก็บไว้บน USB แฟลชไดรฟ์

- NTFS ไม่ได้รับการสนับสนุนภายใต้สภาพแวดล้อมแบบ DOS อย่าจัดเก็บไฟล์ BIOS และ BIOS Updater ลงในฮาร์ดดิสก์ หรือ USB แฟลชไดรฟ์ที่เป็นรูปแบบ NTFS
- อย่าจัดเก็บไฟล์ BIOS ไปยังแผ่นฟล็อปปี้ดิสก์ เนื่องจากความจุดิสก์ที่ต่ำ

3. ปิดคอมพิวเตอร์ และถอดฮาร์ดดิสก์ไดรฟ์ SATA ทั้งหมด (อุปกรณ์ซื้อเพิ่ม)

การบูตระบบในสภาพแวดล้อมแบบ DOS

1. ใส่ USB แฟลชไดรฟ์ที่มีไฟล์ BIOS ล่าสุดและ BIOS Updater ลงในพอร์ต USB
2. บูตคอมพิวเตอร์ของคุณ เมื่อโลโก้ ASUS ปรากฏขึ้น, กด <F8> เพื่อแสดง **Boot Device Select Menu (เมนูเลือกอุปกรณ์บูต)** ของ BIOS ใส่แผ่น DVD สนับสนุนลงในออปติคัลไดรฟ์ และเลือกออปติคัลไดรฟ์เป็นอุปกรณ์บูต



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXXX


↑ and ↓ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. เมื่อเมนู **Make Disk (สร้างดิสก์)** ปรากฏขึ้น, เลือกรายการ **FreeDOS command prompt (พรอมต์คำสั่ง FreeDOS)** โดยการกดหมายเลขรายการ
4. ที่พรอมต์ FreeDOS, พิมพ์ **d:** และกด <Enter> เพื่อสลับดิสก์จากไดรฟ์ C (ออปติคัลไดรฟ์) ไปยังไดรฟ์ D (USB แฟลชไดรฟ์)

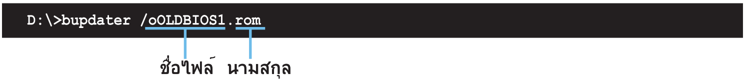
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

การสำรอง BIOS ปัจจุบัน

ในการสำรองไฟล์ BIOS ปัจจุบันโดยใช้ BIOS Updater

> ตรวจดูให้แน่ใจว่า USB แฟลชไดรฟ์ไม่ได้ป้องกันการเขียน และมีพื้นที่ว่างเพียงพอเพื่อจัดเก็บไฟล์

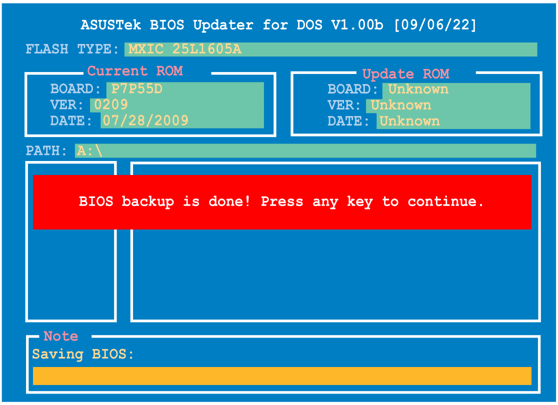
1. ที่พรอมต์ FreeDOS, พิมพ์ **bupdater /o[ชื่อไฟล์]** และกด <Enter>



```
D:\>bupdater /oOLDBIOS1.rom
```

เมื่อ [ชื่อไฟล์] คือชื่อไฟล์ที่กำหนดโดยผู้ใช้ ซึ่งมีความยาวไม่เกิน 8 ตัวอักษรสำหรับชื่อไฟล์หลัก และอีก 3 ตัวอักษรสำหรับนามสกุลของไฟล์

2. หน้าจอสำรองของ BIOS Updater จะปรากฏขึ้น โดยระบุกระบวนการสำรอง BIOS เมื่อการสำรอง BIOS เสร็จ, กดปุ่มใดๆ เพื่อกลับไปยัง DOS พร็อมต์

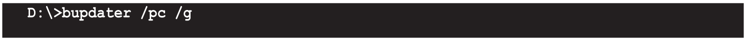


```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                    Update ROM
BOARD: P7P55D                  BOARD: Unknown
VER: 0209                      VER: Unknown
DATE: 07/28/2009               DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

การอัปเดตไฟล์ BIOS

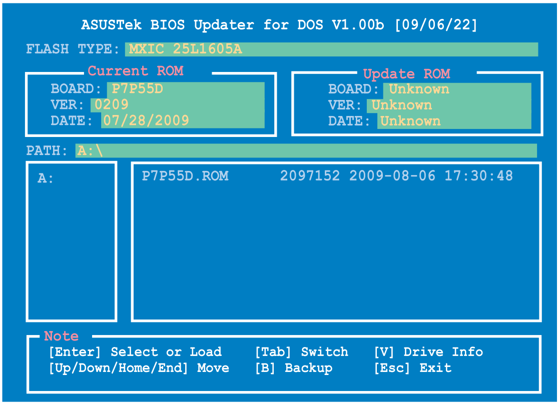
ในการอัปเดตไฟล์ BIOS ปัจจุบันโดยใช้ BIOS Updater

1. ที่พรอมต์ FreeDOS, พิมพ์ **bupdater /pc /g** และกด <Enter>



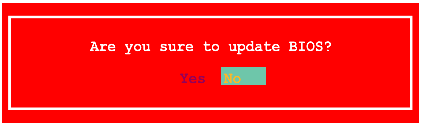
```
D:\>bupdater /pc /g
```

2. หน้าจอ BIOS Updater จะปรากฏขึ้นดังแสดงด้านล่าง



```
            ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
      Current ROM                       Update ROM
  BOARD: P7P55D                     BOARD: Unknown
  VER: 0209                         VER: Unknown
  DATE: 07/28/2009                  DATE: Unknown
PATH: A:\
  A:          P7P55D.ROM      2097152 2009-08-06 17:30:48

  Note
  [Enter] Select or Load       [Tab] Switch    [V] Drive Info
  [Up/Down/Home/End] Move      [B] Backup      [Esc] Exit
```

3. กด <Tab> เพื่อสลับระหว่างฟิลด์ต่างๆ บนหน้าจอ และใช้ปุ่ม <ขึ้น/ลง/Home/End> เพื่อเลือกไฟล์ BIOS และกด <Enter> BIOS Updater จะตรวจสอบไฟล์ BIOS ที่เลือก และขอให้คุณยืนยันการอัปเดต BIOS



```
Are you sure to update BIOS?
         Yes    No
```

4. เลือก **Yes (ใช่)** และกด <Enter> เมื่อการอัปเดต BIOS เสร็จ, กด <ESC> เพื่อออกจาก BIOS Updater เริ่มคอมพิวเตอร์ของคุณใหม่

อย่าปิด หรือรีเซ็ตระบบในขณะที่กำลังอัปเดต BIOS เพื่อป้องกันการบูตระบบล้มเหลว!

- สำหรับ BIOS Updater เวอร์ชั่น 1.04 ขึ้นไป, ยูทิลิตี้จะออกจาก DOS พร็อมต์โดยอัตโนมัติหลังจากการอัปเดต BIOS
- ตรวจดูให้แน่ใจว่าได้โหลดการตั้งค่าเริ่มต้น BIOS เพื่อให้มั่นใจถึงความเข้ากันได้และเสถียรภาพของระบบ เลือกรายการ **Load Setup Defaults (โหลดการตั้งค่าเริ่มต้น)** ภายใต้เมนู **Exit (ออก)** ของ BIOS สำหรับรายละเอียด ให้ดูบทที่ 3 ของคู่มือผู้ใช้เมนบอร์ดของคุณ
- ตรวจดูให้แน่ใจว่าทำการเชื่อมต่อฮาร์ดดิสก์ไดรฟ์ SATA ทั้งหมดหลังจากที่อัปเดตไฟล์ BIOS ถ้าคุณถอดออกมาก่อนหน้านี้

บทที่ 3: การแก้ไขปัญหา

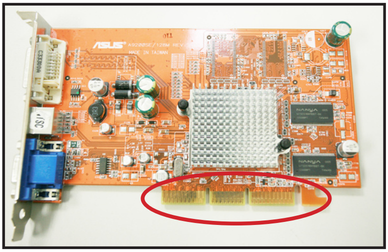
3.1 การแก้ไขปัญหาสำหรับเมนบอร์ด DIY

หลังจากที่ประกอบคอมพิวเตอร์ของคุณแล้ว คุณอาจพบกับปัญหาในการเริ่มต้นระบบ บทนี้จะให้คำตอบที่มักพบโดยทั่วไปเกี่ยวกับ PC ของคุณ ก่อนที่จะเข้าสู่ระบบปฏิบัติการ อ่านบทนี้สำหรับการแก้ไขปัญหาพื้นฐาน คำอธิบายเหล่านี้จะช่วยประหยัดเวลา และลดความยุ่งยากให้กับคุณในการติดต่อทีมงานสนับสนุนด้านเทคนิคของ ASUS หรือการส่งคืนผลิตภัณฑ์เพื่อรับบริการการรับประกัน

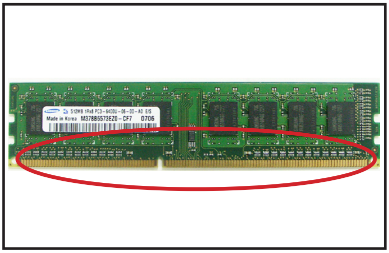
3.1.1 การแก้ไขปัญหาพื้นฐาน

ก. การเชื่อมต่อที่ไม่ดี

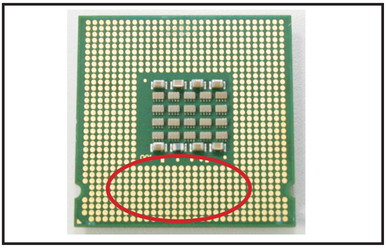
1. ตรวจดูว่าไม่มีอะไรเปื้อนที่หน้าสัมผัสสีทอง หรือพิน ต่างๆ
2. ใช้ก้านสำลี หรือยางลบ ค่อยๆ ถูบริเวณหน้าสัมผัสสีทอง อย่าลืมใช้แปรงปัดเศษยางลบออกไปด้วย



หน้าสัมผัสสีทองของการ์ด VGA



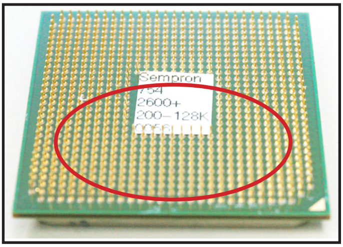
หน้าสัมผัสสีทองของ DIMM



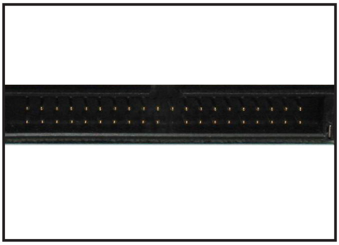
จุดเชื่อมต่อสีทองของโปรเซสเซอร์ LGA775

ถือการ์ด หรือ CPU ที่ขอบ และอย่าแตะบริเวณหน้าสัมผัสสีทอง ประจุไฟฟ้าสถิตจะทำให้เกิดความเสียหายอย่างรุนแรงต่ออุปกรณ์

3. ตรวจดูให้แน่ใจว่าไม่มีพินใดหักหรืองอ ไม่ว่าจะเป็นพินบนขั้วต่อ หรือพิน CPU พินที่หักหรืองอ จะเป็นสาเหตุให้องค์ประกอบทำงานผิดพลาด ติดต่อร้านค้าปลีกของคุณ เพื่อรับความช่วยเหลือเพิ่มเติม



พินสีทองบน CPU ของ AMD

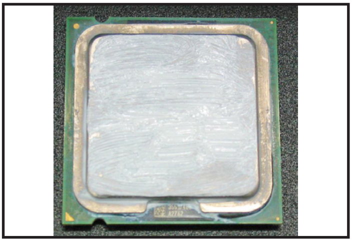


พินขั้วต่อ

ถ้าพินที่หัก หรืองอ เกิดขึ้นภายหลังจากที่ซื้อ ร้านค้าปลีกอาจคิดค่าซ่อมแซม บางครั้งพินที่หัก หรืองอนั้นไม่สามารถซ่อมแซมได

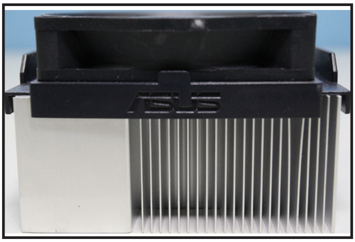
ข. CPU ร้อนเกินไป

1. เช็ดทำความสะอาดพื้นผิว CPU ด้วยผ้าที่สะอาด หยดสารระบายความร้อนหลายๆ หยด ลงบนบริเวณที่เปิดของ CPU ซึ่งจะสัมผัสกับครีบระบายความร้อน ตรวจดูให้แน่ใจว่าได้เกลี่ยสารเป็นชั้นบางๆ อย่างสม่ำเสมอ

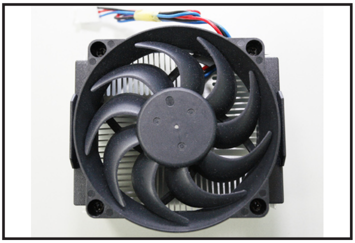


พื้นผิว CPU

2. ตรวจดูให้แน่ใจว่าไม่มีสิ่งปนเปื้อนบนครีบระบายความร้อนและพัดลม



มุมมองด้านข้างของครีบระบายความร้อนและพัดลม



มุมมองด้านบนของครีบระบายความร้อนและ พัดลม

3. ปฏิบัติตามขั้นตอนของผู้ผลิตครีบระบายความร้อนและพัดลม เพื่อทำความสะอาดสิ่งปนเปื้อนซึ่งจะทำให้พัดลมหมุนช้าลง

3.2 ปัญหาที่พบอื่นๆ

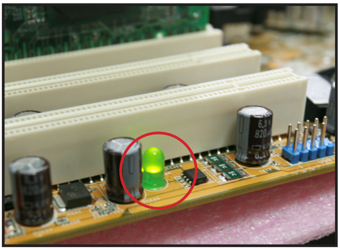
- ในขณะที่ถอดอุปกรณ์ออกจากระบบ ให้แน่ใจว่าได้ถอดปลั๊กสายเคเบิลเพาเวอร์ทั้งหมด
- ข้อความผิดพลาดทั้งหมดจะแสดงขึ้นบนหน้าจอ ระหว่างการทดสอบตัวเองเมื่อเปิดเครื่อง (POST)
- ถ้ามีเสียงบี๊ปของ BIOS, ให้ดูส่วนที่ 1.11 สำหรับรายละเอียด
- ดูตารางตรวจสอบด้านล่าง เพื่อทำการตรวจสอบเพิ่มเติม

	รายการตรวจสอบ					
	LED เพาเวอร์	**หน้าจอติด**	**ครีบระบายความร้อนและพัดลม**	**การบี๊ปของ BIOS**	**ข้อความผิดพลาด**	**หน้าอ้างอิง**
ไม่มีพลังงานเข้า	ดับ	ไม	หยุด	ไม	N/A	3-4
ไม่มีอะไรแสดงบนหน้าจอ	ติด	ไม	หยุด	ไม	N/A	3-5
	ติด	ไม	ทำงาน	ไม	N/A	3-5
	ติด	ไม	ทำงาน	ใช	N//A	3-5
ไม่สามารถเข้า OS	ติด	ใช	ทำงาน	ใช	ใช	3-5
	ติด	ใช	ทำงาน	ไม	ใช	3-5
	ติด	ใช	ทำงาน	ไม	ไม	3-5

ถ้าปัญหาได้รับการแก้ไขแล้ว แต่มีปัญหาใหม่เกิดขึ้น ให้ดำเนินการในรายการตรวจสอบอีกครั้ง ถ้ายังคงมปัญหาอยู่ ให้ติดต่อร้านค้าปลี ก หรือทีมสนับสนุนด้านเทคนิคของ ASUS เพื่อขอความช่วยเหลือเพิ่มเติม

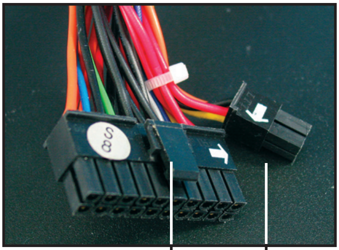
3.2.1 ไม่มีพลังงานเข้า

เมนบอร์ด ASUS มาพร้อมกับไฟ LED เพาเวอร์เตรียมพร้อม ไฟ LED ติด ขึ้น เพื่อระบุว่าระบบเปิดอยู่ ถ้าไฟ LED ไม่ติด ให้ปฏิบัติตามขั้นตอน ด้านล่าง เพื่อแก้ไขปัญหา

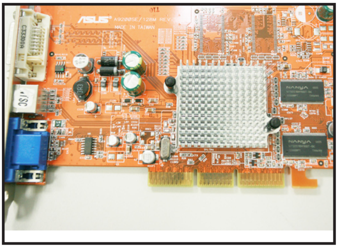


1. ตรวจดูให้แน่ใจว่าได้ปรับแรงดันไฟฟ้า AC ขาเข้ าของเพาเวอร์ซัพพลายเป็นค่าที่ถูกต้องในประเทศของคุณ และเพาเวอร์ซัพพลายเปิด อยู่

- ก่อนที่จะปรับแรงดันไฟฟ้า AC ขาเข้า ให แน่ใจว่าได้ถอดปลั๊กเพาเวอร์แล้ว การทำ ไม่เช่นนั้น จะทำให้เกิดความเสียหายอย่างรุนแรงต่อชุดเพาเวอร์ซัพพลาย
- การไม่ปรับเพาเวอร์ซัพพลายเป็นแรงดันไฟฟ้า AC ที่ถูกต้อง จะทำให้เกิดความเสียหายอย่างรุนแรงต่อระบบ



2. ตรวจดูให้แน่ใจว่าคุณเสียบสายไฟเข้ากับเต้าเสียบที่ผนัง
    - เชื่อมต่อปลั๊กเพาเวอร์โดยตรงเข้ากับเต้าเสียบที่ผนัง อย่าเชื่อมต่อ ปลั๊กเข้ากับสายต่อ, UPS หรืออุปกรณ์อื่นๆ
    - สลับปลั๊กเพาเวอร์ของระบบกับจอภาพ เพื่อตรวจสอบว่าเต้าเสียบที่ผนังทำงานปกติหรือไม



3. ถ้าปัญหายังคงมีอยู่ คุณอาจจำเป็นต้องติดต่อร้านค้าปลีก เพื่อหาชุดเพาเวอร์ซัพพลายใหม่ ถ้าชุ ดเพาเวอร์ซัพพลายทำงาน ให้ติดต่อร้านค้าปลีกเมนบอร์ด ASUS ของคุณ เพื่อขอรับบริการการรับประกัน

3.2.2 ไม่สามารถบูต; ไม่มีอะไรแสดงบนหน้าจอ

การที่เครื่องไม่สามารถบูต และหน้าจอไม่แสดงผล ส่วนใหญ่มีสาเหตุจากข้อบกพร่องของอุปกรณ์ หรือการติดตั้งที่ไม ถูกต้อง ปฏิบัติตามขั้นตอนด้านล่าง เพื่อแก้ไขปัญหา

1. ตรวจดูให้แน่ใจว่าสายเคเบิลเพาเวอร์ทั้งหมดเชื่อมต่ออยู่ ทั้งจากระบบและจอภาพ
2. ตรวจดูว่าปัญหามาจากอุปกรณ์ต่อพ่วงหรือไม
    - ถอดเอ็กซ์แพนชั่นการ์ดและอุปกรณ์ทั้งหมดออก ใช้เฉพาะเมนบอร์ด, จอภาพ, การ์ด VGA, โมดูลหน่วยความจำ, เพาเวอร์ซัพพลาย, ครีบระบายความร้อนและพัดลม, แป้นพิมพ์ และเมาส์ เพื่อบูตระบบใหม
    - ถ้าระบบทำงานเป็นปกติ หมายความว่าอุปกรณ์ต่อพ่วงบางอย่างเป็นสาเหตุของปัญหา ติดตั้งอุปกรณ์ต่อพ่วงท คุณถอดออกมากลับเข้าไปในระบบทีละชิ้น เพื่อหาอุปกรณ์ที่เสีย
3. ตรวจดูว่าปัญหามาจากอุปกรณ์ระบบพื้นฐานหรือไม
    - ถ้าคุณมีอุปกรณ์สำรองเก็บไว้บ้าง คุณสามารถถอดและทดแทนอุปกรณ์ เพื่อค้นหาอุปกรณ์ที่เสียตามลำดับดังน "โมดูลหน่วยความจำ, CPU, เมนบอร์ด, ฮาร์ดดิสก์/ออปติคัลดิสก์ไดรฟ์, แป้นพิมพ์/เมาส์"

เมื่อคุณพบอุปกรณ์ที่เสียแล้ว ให้ติดต่อร้านค้าอุปกรณ์ของคุณเพื่อนำไปซ่อมแซม

3.2.3 ไม่สามารถเข้าสู่ระบบปฏิบัติการ

1. ถ้าปัญหาเกิดขึ้นหลังจากที่คุณเพิ่มฮาร์ดแวร์ ถอดฮาร์ดแวร์ที่เพิ่มเข้าไปใหม่ และบูตระบบใหม่ ถ้าระบบทำงานเป็น ปกติโดยไม่ได้ใส่ฮาร์ดแวร์ อุปกรณ์อาจเสีย หรือใช้งานกับระบบไม่ได้ ติดต่อร้านค้าอุปกรณ์เพื่อขอความช่วยเหลือ
2. ถ้าปัญหาเกิดขึ้นหลังจากที่คุณติดตั้งซอฟต์แวร์หรือไดรเวอร์ ปฏิบัติตามขั้นตอนด้านล่าง เพื่อแก้ไขปัญหา

    ก. เข้าสู่ระบบปฏิบัติการในเซฟโหมด และลบซอฟต์แวร์ หรือไดรเวอร์ออก

    ข. ติดต่อบริษัทของระบบปฏิบัติการ เพื่อขอรับการสนับสนุนเพิ่มเติม

    ค. ถ้าขั้นตอนก่อนหน้าไม่สามารถแก้ไขปัญหาได้
    คุณอาจจำเป็นต้องฟอร์แมตฮาร์ดดิสก์ของคุณ และติดตั้ง ระบบปฏิบัติการใหม่

3. ถ้าปัญหาเกิดขึ้นหลังจากที่คุณเปลี่ยนการตั้งค่า BIOS, ให้บูตระบบใหม่ และเข้าสู่ BIOS เพื่อโหลดการตั้งค่า มาตรฐาน ให้ดูคู่มือผู้ใช้เมนบอร์ดสำหรับรายละเอียด

4. ถ้าปัญหามาจากการติดไวรัส หรือไฟล์เสียหาย ให้ทำตามขั้นตอนด้านล่าง เพื่อแก้ไขปัญหา
   ก. เข้าสู่ระบบปฏิบัติการในเซฟโหมด เพื่อทำการสแกนไวรัสอย่างสมบูรณ์ โดยใช้แอปพลิเคชั่นป้องกันไวรัส

   ข. ติดต่อบริษัทของระบบปฏิบัติการ เพื่อขอรับการสนับสนุนเพิ่มเติม

   ค. ถ้าขั้นตอนก่อนหน้าไม่สามารถแก้ไขปัญหาได้ คุณอาจจำเป็นต้องฟอร์แมตฮาร์ดดิสก์ของคุณ และติดตั้ง ระบบปฏิบัติการใหม่

3.2.4 คำถามที่พบบ่อยๆ

Q1: หน่วยความจำที่รายงานใน POST แตกต่างจากหน่วยความจำที่ติดตั้งจริง

A1: ความแตกต่างของหน่วยความจำที่รายงาน อาจมีผลจากโมดูลหน่วยความจำที่เสีย หรือการติดตั้ง DIMM ไม่ถูกต้อง ตรวจดูให้แน่ใจว่า DIMM อยู่ในสภาพที่ดี DIMM ติดตั้งอย่างถูกต้อง ให้ดูคู่มือผู้ใช้เมนบอร์ดสำหรับรายละเอียด ถ้าคุณติดตั้งหน่วยความจำ 4.0 GB และระบบรายงานว่า 3.X GB นี่เป็นอาการปกติ

Q2. ระบบไม่สามารถตรวจพบฟล็อปปี้ดิสก์ไดรฟ์ แต่ฟล็อปปี้ดิสก์ยังคงมีไฟติดอยู่

A2: ติดตั้งสายเคเบิลปล็อปปี้ดิสก์ผิดด้าน ตรวจดูให้แน่ใจว่า แถบสีแดงบนสายเคเบิล (ด้านพิน 1) ต้องเสียบให้ตรงกับ ด้านที่เป็นพิน 1 บนฟล็อปปี้ดิสก์ไดรฟ์

Q3: ไม่สามารถเข้าสู่ระบบปฏิบัติการหลังจากเสียบแฟลชดิสก์ USB หรือฮาร์ดดิสก์ไดรฟ์ภายนอก

A3: เมื่อระบบตรวจพบแฟลชดิสก์ USB หรือฮาร์ดดิสก์อินเตอร์เฟซ USB, ระบบอาจเปลี่ยนลำดับของอุปกรณ์ในการบูต ถอดอุปกรณ์ USB ออก และเริ่มระบบใหม่

Q4: เมื่อติดตั้ง Windows XP ระบบไม่พบฮาร์ดดิสก์ไดรฟ์ที่ติดตั้งไปยังคอนโทรลเลอร์ RAID

A4: Windows XP ไม่มีไดรเวอร์คอนโทรลเลอร์ RAID ดังนั้นระบบจะไม่พบฮาร์ดดิสก์ไดรฟ์ คัดลอกไดรเวอร์ คอนโทรลเลอร์ RAID ไปยังฟล็อปปี้ดิสก์ และเมื่อบูตระบบด้วยดิสก์ Windows XP, ให้กด <F6> เพื่ออ่านไดรเวอร์ จากฟล็อปปี้ดิสก์ ให้ดูคู่มือผู้ใช้เมนบอร์ดสำหรับรายละเอียด

บทท 4: เทคนิคการดูแลคอมพิวเตอร์

4.1 การดูแล PC ของคุณอย่างเหมาะสม

คอมพิวเตอร์ส่วนบุคคลของคุณก็เหมือนกับเครื่องใช้อื่นๆ ในบ้าน เก็บรักษาคอมพิวเตอร์ให้ห่างจากความชื้น ไม่ให้ ถูกแสงแดดโดยตรง และแหล่งไฟฟ้าสถิต ในกรณีที่เครื่องเสีย คุณไม่ควรย้ายคอมพิวเตอร์เมื่อเปิดเครื่องอยู่ ฝุ่น ภายในจะส่งผลกระทบกับการทำงานของดิสก์ไดรฟ์ ทำให้เกิดปัญหาเครื่องร้อนเกินไป ซึ่งเป็นสาเหตุให้คอมพิวเตอร์ ทำงานล้มเหลว หรือทำให้องค์ประกอบต่างๆ เสียหายได้

4.2 ความรู้พื้นฐาน

1. คลุมคอมพิวเตอร์ด้วยที่คลุมกันฝุ่นเมื่อไม่ได้ใช้งาน
2. เมื่อใช้คอมพิวเตอร์ อย่าวางสิ่งใดๆ บนจอภาพ ซึ่งจะขวางกั้นรูระบายอากาศ ความร้อนที่มากเกินไป จะทำ ให้จอภาพทำงานผิดพลาด
3. อย่าวางคอมพิวเตอร์ชิดกับผนัง ควรปล่อยให้มีพื้นที่เหลือบ้างเพื่อระบายความร้อน ความร้อนที่มากเกินไปจะทำ ให้ระบบค้าง
4. วางคอมพิวเตอร์ไว้บนพื้นผิวที่มั่นคง
5. เก็บคอมพิวเตอร์ให้ห่างจากบริเวณที่มีอุณหภูมิร้อนหรือเย็นจัด อุณหภูมิสภาพแวดล้อมที่ดีที่สุดคือ 5ºC ถึง 30ºC ใช้เครื่องปรับอากาศ หรือพัดลมไฟฟ้า เพื่อให้มีการระบายความร้อนได้ดีขึ้น
6. จัดสายเคเบิลภายในให้เป็นระเบียบ เพื่อหลีกเลี่ยงการไหลเวียนอากาศที่ไม่เพียงพอ

4.3 ความรู้ในการใช้งาน

1. เปิดและปิดคอมพิวเตอร์อย่างสม่ำเสมอ ถ้าจำเป็นต้องเปิดคอมพิวเตอร์ทิ้งไว้เป็นเวลานาน, ใช้พัดลมระบบ/CPU และชุดเพาเวอร์ซัพพลายที่มีแรงดันไฟฟ้าสูง
2. ไฟฟ้าที่ดับโดยฉับพลัน จะทำให้ฮาร์ดดิสก์ไดรฟ์เสียหาย เมื่อแหล่งจ่ายไฟไม่มีเสถียรภาพ แนะนำให้ใช้ UPS ต่อเข้ากับคอมพิวเตอร์
3. จัดระเบียบไฟล์ข้อมูล ทำการสแกนไวรัส และต่ออายุโปรแกรมไวรัส รวมทั้งจัดระเบียบดิสก์เป็นประจำ
4. ปัดฝุ่น และทำความสะอาดคอมพิวเตอร์อย่างสม่ำเสมอ (ถอดสายไฟทั้งหมดก่อนที่จะทำความสะอาด)
    - ถอดเมนบอร์ด และฮาร์ดดิสก์/ออปติคัลดิสก์ไดรฟ์ จากนั้นทำความสะอาดด้วยการเป่าอากาศ และแปรงที่ อ่อนนุ่ม

    - กำจัดฝุ่นและเศษผมบนชุดเพาเวอร์ซัพพลาย ด้วยเครื่องดูดฝุ่นที่ป้องกันประจุไฟฟ้าสถิต

4.4 เทคนิค

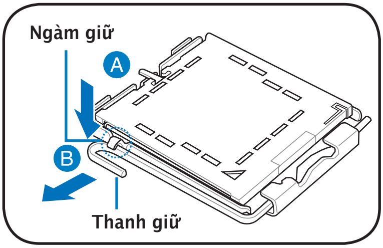
1. ถ้าจะไม่ใช้คอมพิวเตอร์เป็นเวลานาน ให้ใส่สารดูดความชื้นในตัวเครื่อง เพื่อป้องกันความเสียหาย เนื่องจากความชื้น
2. ในบริเวณที่มีภูมิอากาศร้อนชื้น คุณควรเป็นคอมพิวเตอร์ทุกสัปดาห์ การทำเช่นนี้จะช่วยป้องกันความ เสียหายเนื่องจากความชื้น

Chương 1: Khởi động nhanh

1.1 Lắp CPU

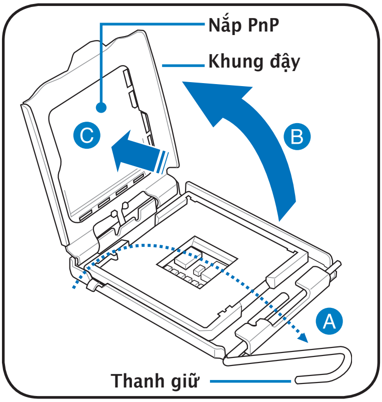
1.1.1 Đế cắm Intel® LGA775

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Ấn thanh giữ CPU bằng ngón cái (A), sau đó chuyển nó sang trái (B) cho đến khi nó nhả ra từ ngàm giữ.

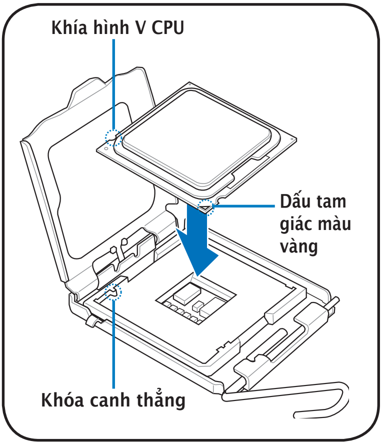

Ngàm giữ
A
B
Thanh giữ

Để tránh làm hỏng các chân đế cắm, không được tháo nắp PnP trừ khi bạn đang lắp CPU.

3. Nâng thanh giữ CPU theo hướng mũi tên lên một góc 135º.
4. Nâng khung đậy bằng ngón cái và ngón trỏ lên một góc 100º, sau đó đẩy nắp PnP khỏi cửa sổ khung đậy để tháo ra (4B).

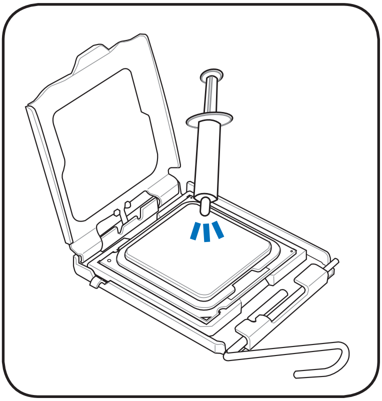

Nắp PnP
Khung đậy
C
B
A
Thanh giữ

5. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế cắm, và sau đó lắp khóa canh thẳng đế cắm vào khía hình V CPU.



CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!

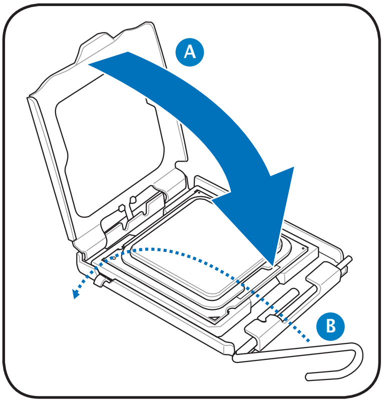
6. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

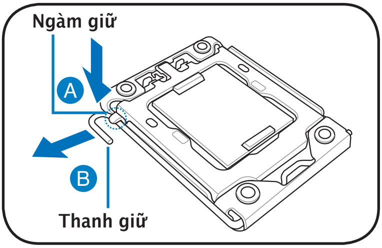
7. Đóng khung đậy (A) lại, sau đó đẩy thanh giữ CPU (B) cho đến khi nó lắp khít vào ngàm giữ.



1.1.2 Đế cắm Intel® LGA1366

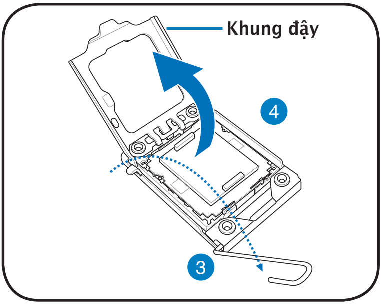
1. Xác định vị trí đế cắm CPU trên bo mạch chủ.

2. Ấn thanh giữ CPU bằng ngón cái (A), sau đó chuyển nó sang trái (B) cho đến khi nó nhả ra từ ngàm giữ.

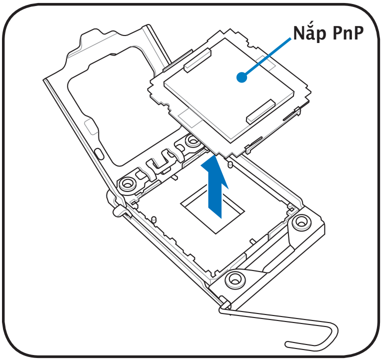


Để tránh làm hỏng các chân đế cắm, không được tháo nắp PnP trừ khi bạn đang lắp CPU.

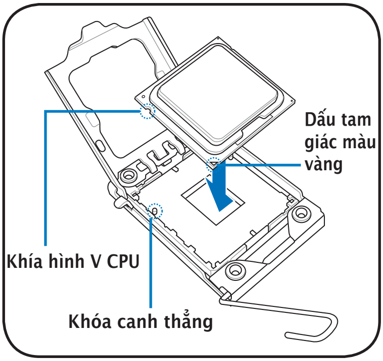
3. Nâng thanh giữ CPU theo hướng mũi tên lên một góc 135°.
4. Nâng khung đậy bằng ngón cái và ngón trỏ lên một góc 100°.



5. Tháo nắp PnP khỏi đế cắm CPU.

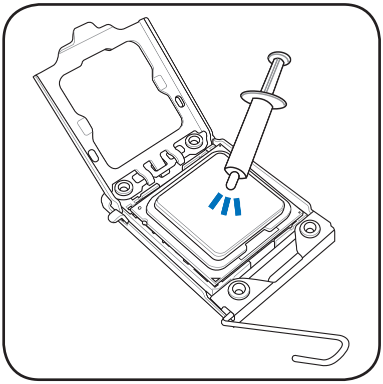


6. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế cắm, và sau đó lắp khóa canh thẳng đế cắm vào khía hình V CPU.



CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!

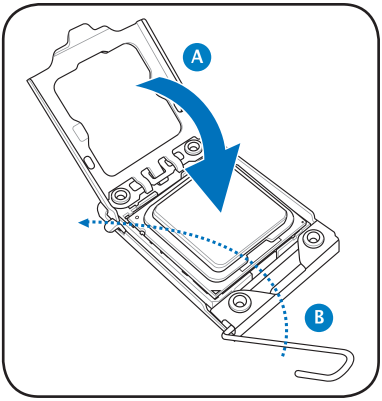
7. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

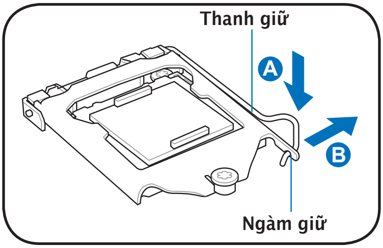
8. Đóng khung đậy (A) lại, sau đó đẩy thanh giữ CPU (B) cho đến khi nó lắp khít vào ngàm giữ.



1.1.3 Đế cắm Intel® LGA1156

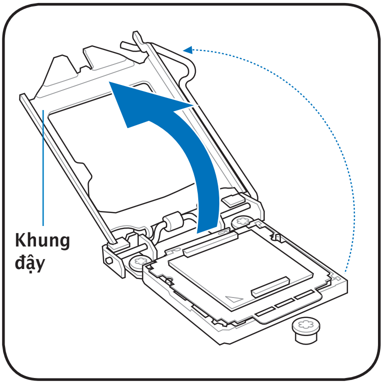
CPU LGA1155 không tương thích với đế cắm LGA1156. KHÔNG ĐƯỢC lắp đặt CPU LGA1155 vào đế cắm LGA1156.

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Ấn cần tải bằng ngón cái (A), sau đó chuyển nó sang phải (B) cho đến khi nó nhả ra khỏi ngàm giữ.

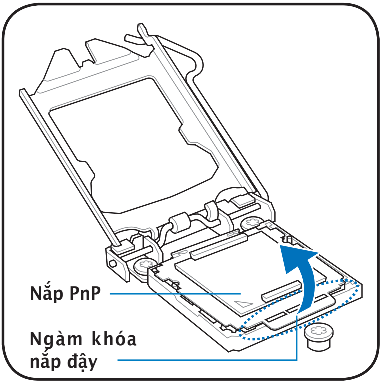


Để tránh làm hỏng các chân đế cắm, không được tháo nắp PnP trừ khi bạn đang lắp đặt CPU.

3. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.

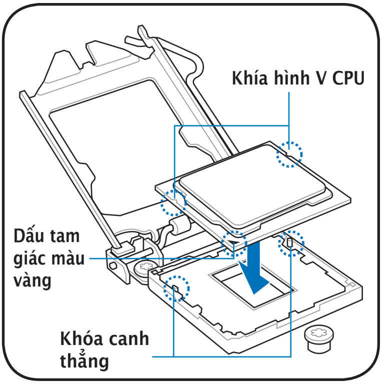


4. Tháo nắp PnP khỏi đế cắm CPU chỉ bằng cách nâng nắp này lên.



5. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế-cắm, và sau đó lắp các khóa canh chỉnh đế cắm vào khía V trên CPU.

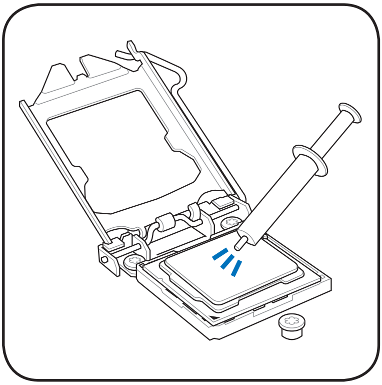
CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!



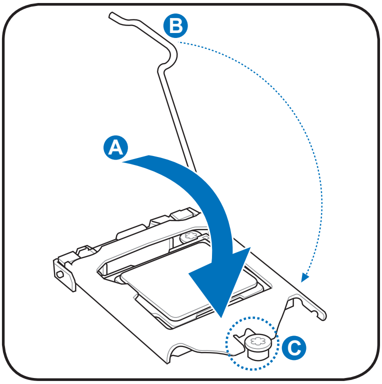
6. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.

Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

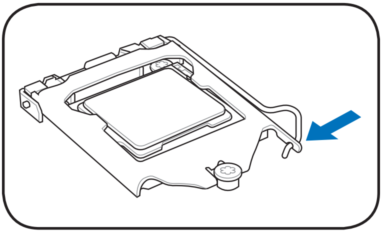
Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.



7. Đóng khung đậy (A), sau đó ấn cần tải (B), đảm bảo mép trước của khung đậy trượt vào khóa giữ (C).



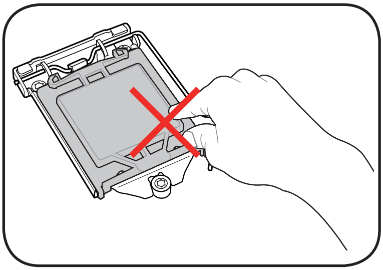
8. Lắp cần tải vào ngàm giữ.



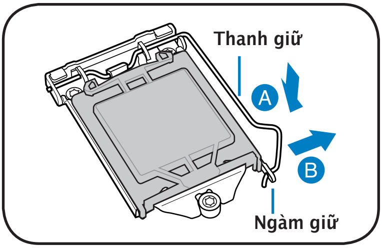
1.1.4 Đế cắm Intel® LGA1155 (Nắp PnP trên khung đậy)

CPU LGA1156 không tương thích với đế cắm LGA1155. KHÔNG ĐƯỢC lắp đặt CPU LGA1156 vào đế cắm LGA1155.

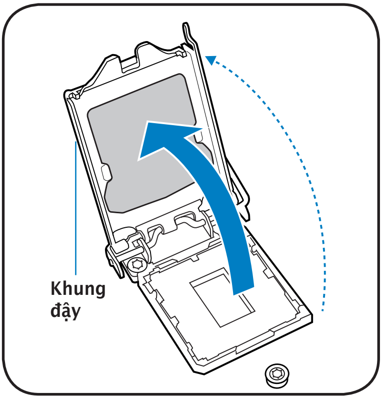
1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Đảm bảo không tháo nắp PnP khỏi đế cắm CPU trước khi bạn lắp đặt CPU.



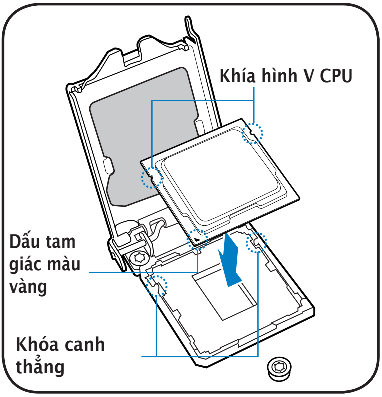
3. Ấn cần tải bằng ngón cái (A), sau đó chuyển nó sang phải (B) cho đến khi nó nhả ra khỏi ngàm giữ.



4. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.



5. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế-cắm, và sau đó lắp các khóa canh chỉnh đế cắm vào khía V trên CPU.


Khía hình V CPU
Dấu tam giác màu vàng
Khóa canh thẳng

CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!

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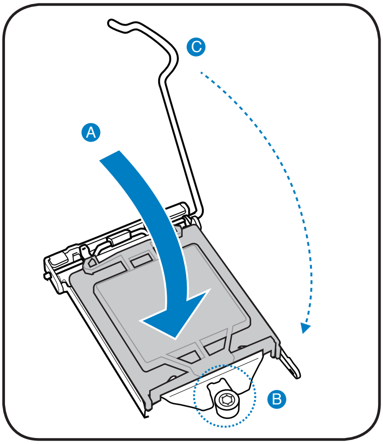
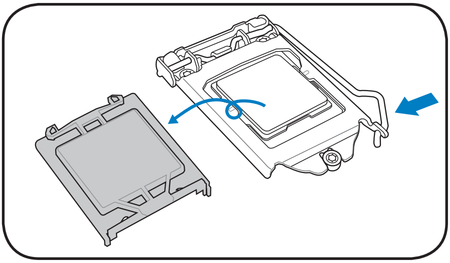
6. Đóng khung đậy (A), đảm bảo cạnh trước của khung đậy trượt vào dưới khóa giữ (B). Rồi ấn cần tải xuống (C).

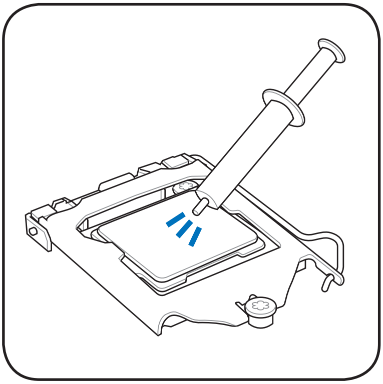


Tiếng Việt

7. Lắp cần tải vào dưới ngàm giữ để tháo nắp PnP khỏi đế cắm CPU.



8. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



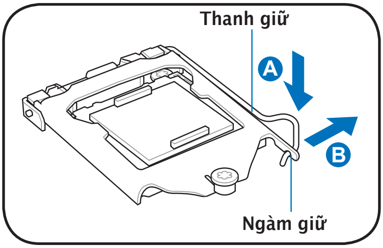
Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

1.1.5 Đế cắm Intel® LGA1155 (Nắp PnP phía dưới khung đậy)

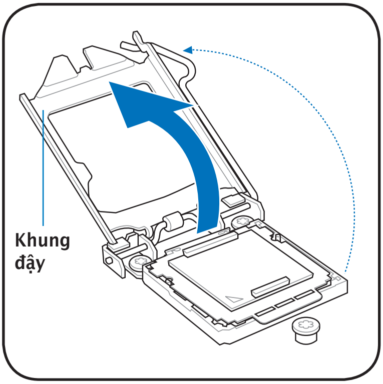
CPU LGA1156 không tương thích với đế cắm LGA1155. KHÔNG ĐƯỢC lắp đặt CPU LGA1156 vào đế cắm LGA1155.

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Ấn cần tải bằng ngón cái (A), sau đó chuyển nó sang phải (B) cho đến khi nó nhả ra khỏi ngàm giữ.

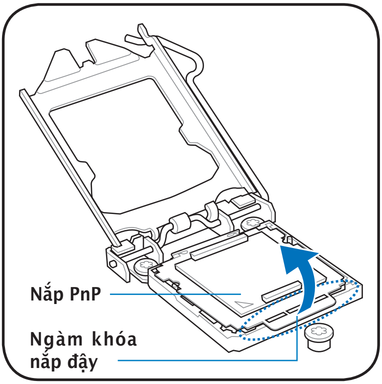


Để tránh làm hỏng các chân đế cắm, không được tháo nắp PnP trừ khi bạn đang lắp đặt CPU.

3. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.

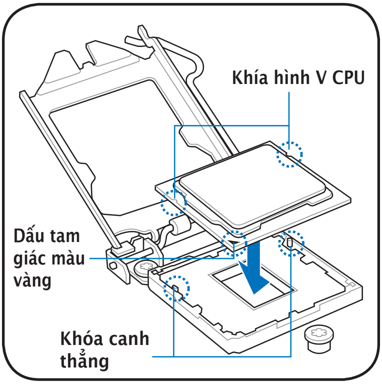


4. Tháo nắp PnP khỏi đế cắm CPU chỉ bằng cách nâng nắp này lên.



5. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế-cắm, và sau đó lắp các khóa canh chỉnh đế cắm vào khía V trên CPU.

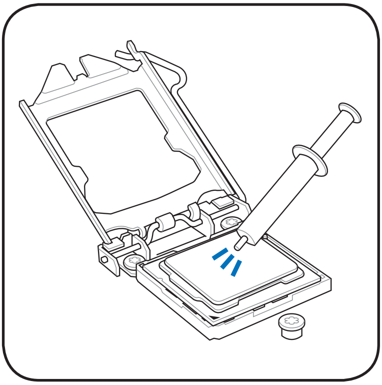
CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!



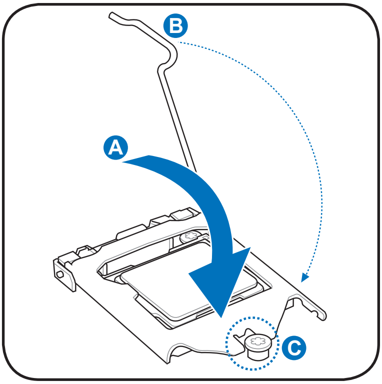
6. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.

Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

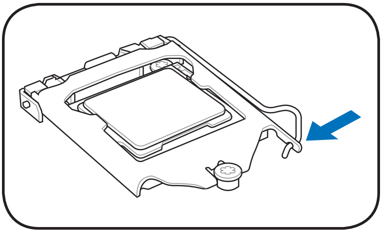
Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.



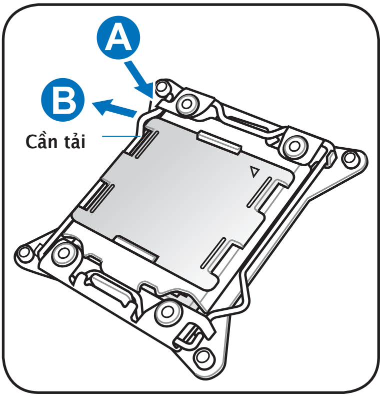
7. Đóng khung đậy (A), sau đó ấn cần tải (B), đảm bảo mép trước của khung đậy trượt vào khóa giữ (C).



8. Lắp cần tải vào ngàm giữ.



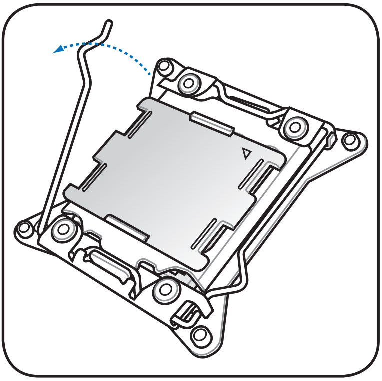
1.1.6 Đế cắm Intel® LGA2011



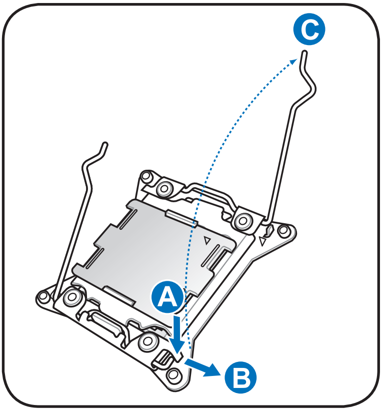
1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Ấn thanh giữ CPU bằng ngón cái (A), sau đó chuyển nó sang trái (B) cho đến khi nó nhả ra từ ngàm giữ.

> Để tránh làm hỏng các chân đế cắm, không được tháo nắp PnP trừ khi bạn đang lắp CPU.

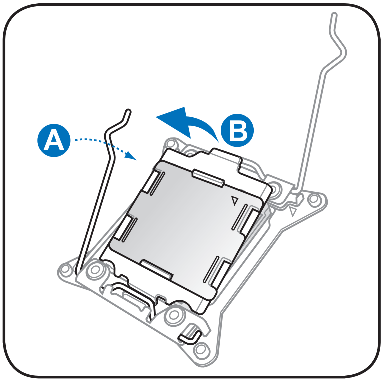
3. Nâng nhẹ cần tải theo hướng mũi tên.



4. Đóng khung đậy (A), sau đó ấn cần tải (B), đảm bảo mép trước của khung đậy trượt vào khóa giữ (C). Nâng nhẹ cần tải theo hướng mũi tên (C).

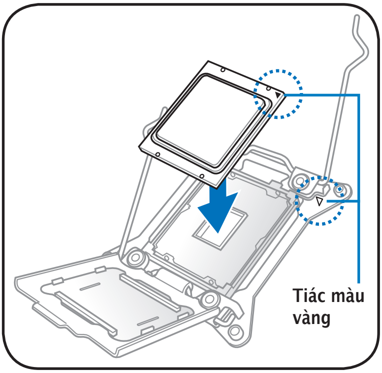


5. Đẩy cần tải trái (A) để nâng thanh tải (B).

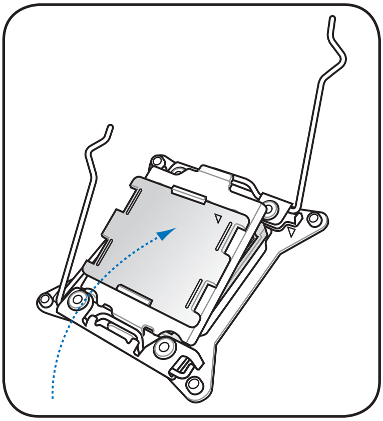


6. Định vị CPU trên đế cắm, đảm bảo dấu tam giác nằm ở góc phải phía trên đế cắm.

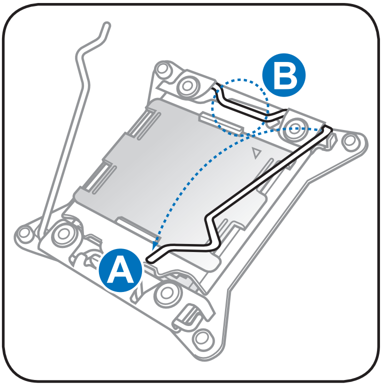
CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!



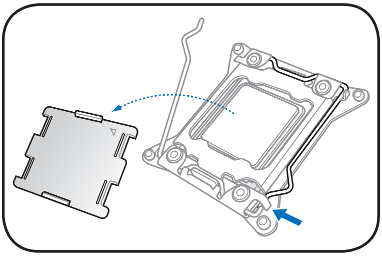
7. Đóng tấm tải.



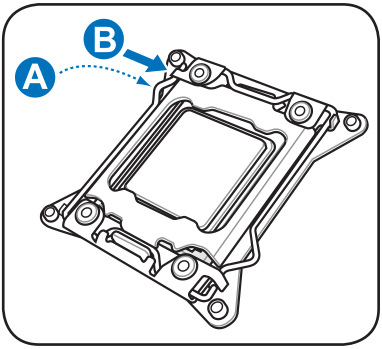
8. Ấn cần tải phải (A) xuống, đảm bảo gờ của thanh tải được gắn cố định bởi cần tải (B).



9. Lắp cần tải phải vào ngàm giữ. Tháo nắp PnP khỏi đế cắm CPU.



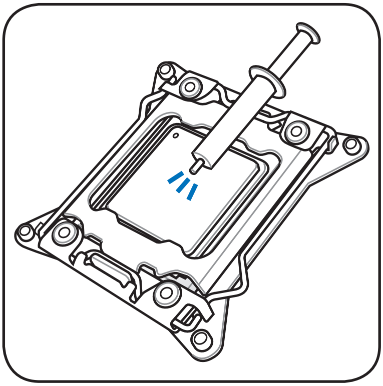
10. Ấn cần tải trái (A) xuống, rồi lắp cần tải vào ngàm giữ (B).



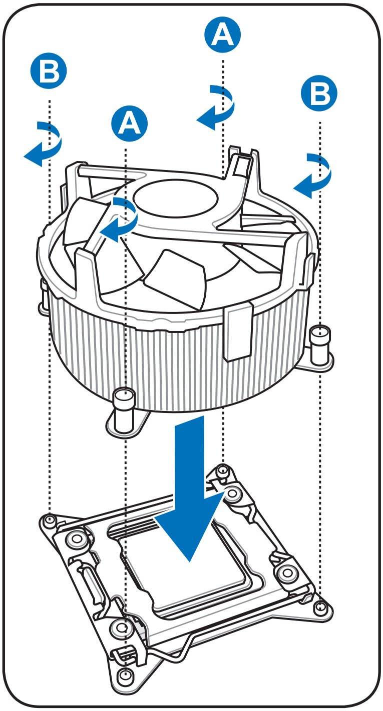
11. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.

Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

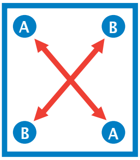
Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.



12. Lắp quạt tản nhiệt vào đỉnh CPU vừa lắp đặt, đảm bảo bốn vít khóa khớp với các lỗ trên đế cắm CPU.
13. Vặn các vít bằng tua vít (hình chữ thập) Philips vừa đủ để gắn quạt tản nhiệt vào đế cắm CPU. Khi đã gắn xong bốn vít, siết chặt từng vít một để khóa chặt hoàn toàn quạt tản nhiệt.



Siết chặt bốn vít trên quạt tản nhiệt theo đường chéo.

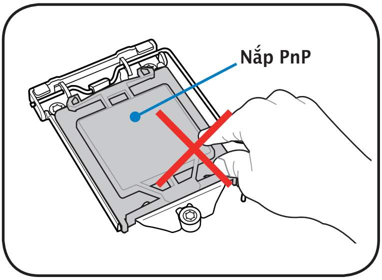


1.1.7 Đế cắm Intel® LGA1150 (Nắp PnP trên khung đậy)

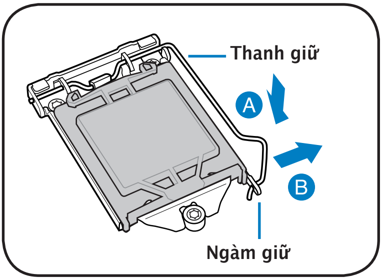
Đảm bảo bạn đã lắp CPU thích hợp chỉ được thiết kế cho đế cắm LGA1150. KHÔNG lắp đặt CPU được thiết kế cho các đế cắm LGA1155 và LGA1156 trên đế cắm LGA1150.

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.

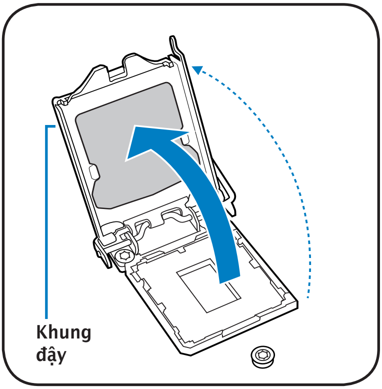
KHÔNG tháo nắp đậy PnP khỏi đế cắm CPU. Vì như vậy có thể làm cong các chân cắm của đế cắm. Xem hình minh họa dưới đây để biết vị trí nắp đậy PnP.



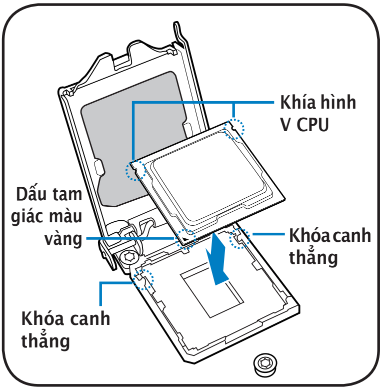
2. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.



3. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.

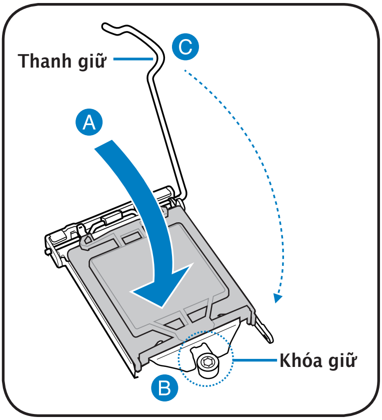


4. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế-cắm, sau đó lắp các khía chữ V CPU khít vào các chốt canh chỉnh trên đế cắm.

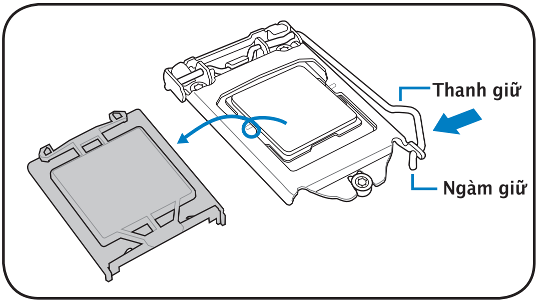

Khía hình V CPU
Dấu tam giác màu vàng
Khóa canh thẳng
Khóa canh thẳng

CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!

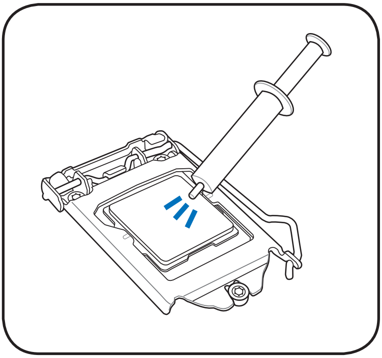
5. Đóng khung đậy (A), đảm bảo cạnh trước của khung đậy trượt vào dưới khóa giữ (B). Rồi ấn cần tải xuống (C).


Thanh giữ
C
A
Khóa giữ
B

6. Lắp cần tải vào dưới ngàm giữ để tháo nắp PnP khỏi đế cắm CPU.


Thanh giữ
Ngàm giữ

7. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

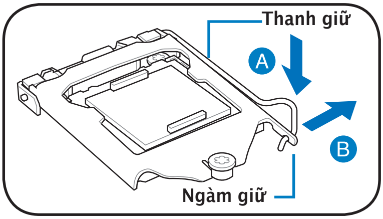
Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

1.1.8 Đế cắm Intel® LGA1150 (Nắp PnP phía dưới khung đậy)

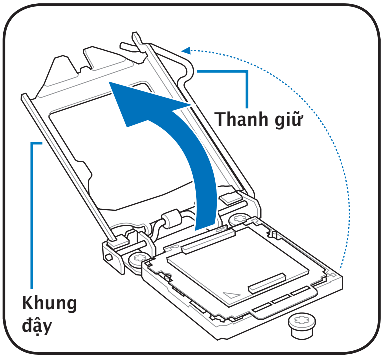
Đảm bảo bạn đã lắp CPU thích hợp chỉ được thiết kế cho đế cắm LGA1150. KHÔNG lắp đặt CPU được thiết kế cho các đế cắm LGA1155 và LGA1156 trên đế cắm LGA1150.

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.

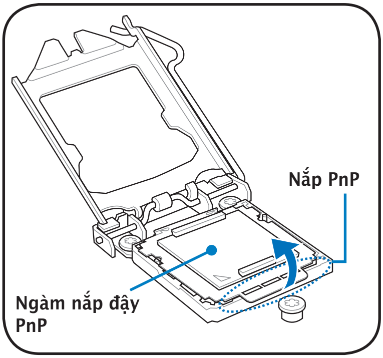
KHÔNG tháo nắp đậy PnP khỏi đế cắm CPU. Vì như vậy có thể làm cong các chân cắm của đế cắm.



3. Nhấc cần tải theo hướng mũi tên cho đến khi khung đậy được nâng lên hoàn toàn.

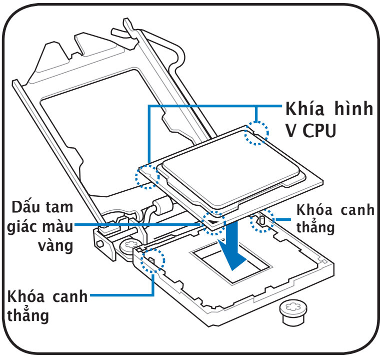


4. Tháo nắp PnP khỏi đế cắm CPU chỉ bằng cách nâng nắp này lên.

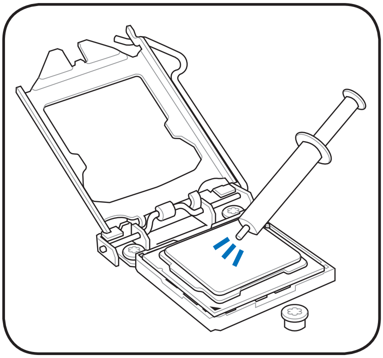


5. Đặt CPU lên đế cắm, đảm bảo tam giác màu vàng nằm ở góc trái phía dưới đế-cắm, sau đó lắp các khía chữ V CPU khít vào các chốt canh chỉnh trên đế cắm.

CPU chỉ lắp vừa theo một hướng thích hợp. KHÔNG được ép CPU vào đế cắm để tránh làm cong các chân cắm trên đế cắm và làm hỏng CPU!


Khía hình V CPU
Dấu tam giác màu vàng
Khóa canh thẳng
Khóa canh thẳng

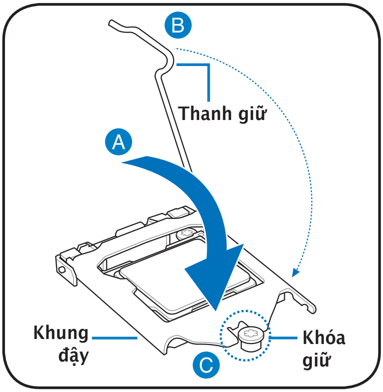
6. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



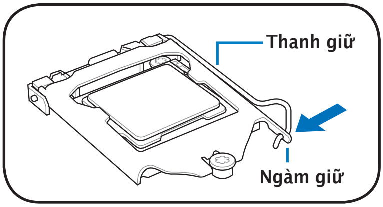
Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

7. Đóng khung đậy (A), sau đó ấn cần tải (B), đảm bảo mép trước của khung đậy trượt vào khóa giữ (C).


B
Thanh giữ
A
Khung đậy
C
Khóa giữ

8. Lắp cần tải vào ngàm giữ.

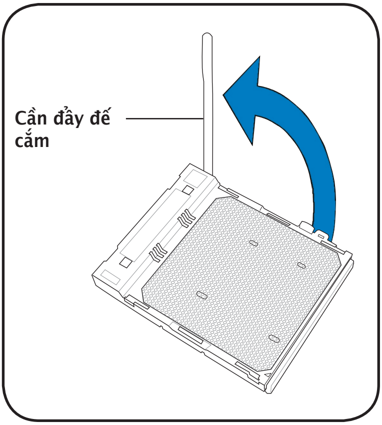

Thanh giữ
Ngàm giữ

1.1.9 Đế cắm AMD AM2 / AM2+ / AM3

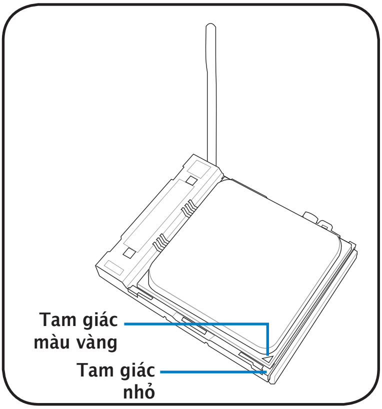
- Các đế cắm AMD AM2 và AM2+ tương thích với các bộ xử lý AMD AM2, AM2+ và AM3.
- Đế cắm AMD AM3 chỉ tương thích với các bộ xử lý AMD AM3. KHÔNG được lắp bộ xử lý AMD AM2+ / AM2 vào đế cắm AM3. Chỉ một số mẫu bo mạch chủ AM3 hỗ trợ các bộ xử lý AM3+ bằng cách nâng cấp BIOS. Tham khảo trang hỗ trợ của ASUS để biết thêm chi tiết.

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Ấn thanh giữ nửa chừng để mở khóa đế cắm, sau đó nâng nó lên một góc 90º.

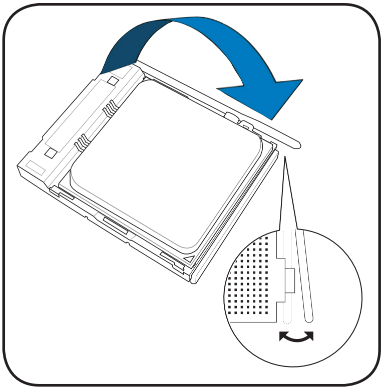
Đảm bảo thanh giữ đế cắm được nâng lên một góc 90º. Nếu không, CPU sẽ không lắp khít hoàn toàn.



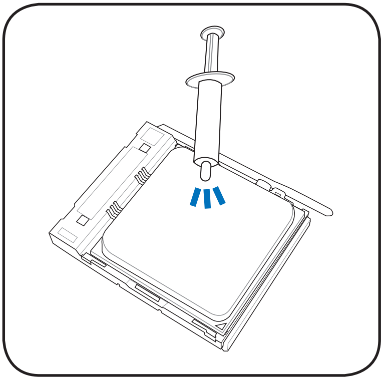
3. Đặt CPU trên đế cắm sao cho cạnh CPU với hình tam giác màu vàng khớp vào góc đế cắm có hình tam giác nhỏ.
4. Cẩn thận cắm CPU vào đế cắm cho đến khi khít vào vị trí.



5. Khi đã cắm đúng CPU, hạ thanh giữ CPU xuống để siết chặt CPU. Thanh giữ CPU sẽ khớp vào ngàm bên hông đế cắm cho biết CPU đã được khóa.



6. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

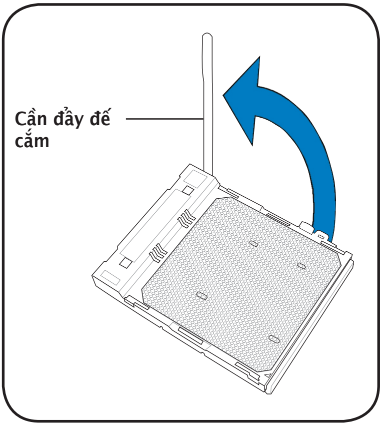
Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

1.1.10 Đế cắm AMD AM3+

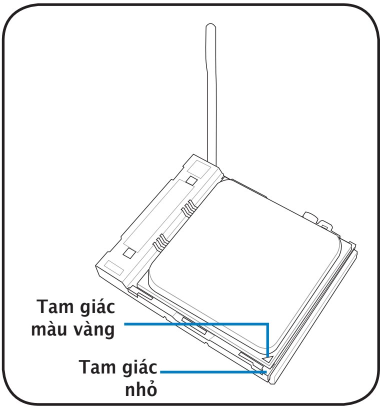
Đế cắm AMD AM3+ chỉ tương thích với các bộ xử lý AMD AM3+ và AM3. Chỉ một số mẫu bo mạch chủ AM3 hỗ trợ các bộ xử lý AM3+ bằng cách nâng cấp BIOS. Tham khảo trang hỗ trợ của ASUS để biết thêm chi tiết.

1. Xác định vị trí đế cắm CPU trên bo mạch chủ.
2. Ấn thanh giữ nửa chừng để mở khóa đế cắm, sau đó nâng nó lên một góc 90º.

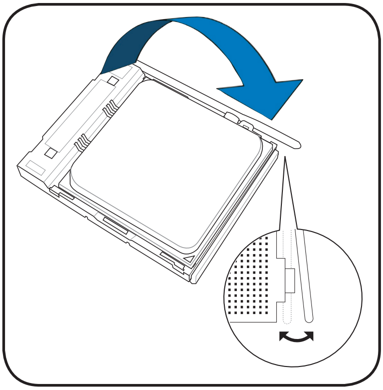
Đảm bảo thanh giữ đế cắm được nâng lên một góc 90º. Nếu không, CPU sẽ không lắp khít hoàn toàn.



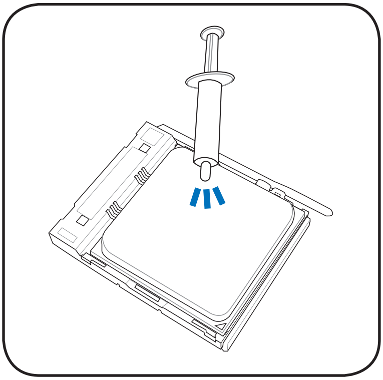
3. Đặt CPU trên đế cắm sao cho cạnh CPU với hình tam giác màu vàng khớp vào góc đế cắm có hình tam giác nhỏ.
4. Cẩn thận cắm CPU vào đế cắm cho đến khi khít vào vị trí.



5. Khi đã cắm đúng CPU, hạ thanh giữ CPU xuống để siết chặt CPU. Thanh giữ CPU sẽ khớp vào ngàm bên hông đế cắm cho biết CPU đã được khóa.



6. Thoa một ít keo cách nhiệt lên mặt ngoài của CPU nơi tiếp xúc với quạt tản nhiệt, đảm bảo nó được phủ một lớp đủ mỏng.



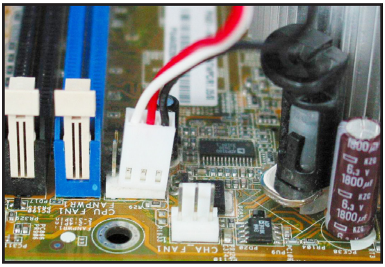
Một số quạt tản nhiệt có kèm theo keo cách nhiệt đã được thoa sẵn. Nếu vậy, hãy bỏ qua bước này.

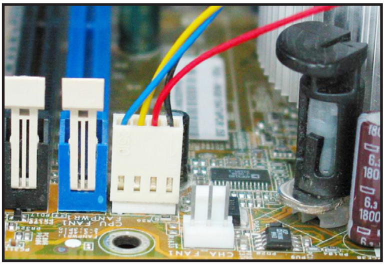
Không được nuốt keo cách nhiệt vì rất độc. KHÔNG được ăn. Nếu nó dính vào mắt hoặc chạm vào da bạn, hãy rửa sạch ngay và tìm đến sự trợ giúp y tế chuyên nghiệp.

1.2 Lắp bộ tản nhiệt và quạt

Để lắp bộ tản nhiệt và quạt CPU:

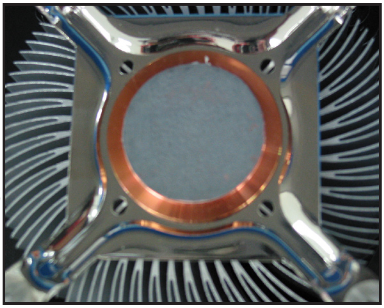
1. Chọn bộ tản nhiệt và quạt được chứng nhận bởi Intel® hay AMD tùy thuộc vào bo mạch chủ của bạn. Có các đầu cắm quạt 3 lỗ (trái) và 4 lỗ (phải). Chỉ các quạt CPU có các đầu cắm 4 lỗ mới hỗ trợ công nghệ ASUS Q-Fan.





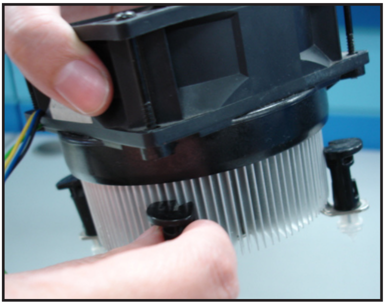
Đối với bộ tản nhiệt do Intel® chứng nhận:

2. Một số bộ tản nhiệt sẽ đi kèm với keo dẫn nhiệt được tra sẵn. Vì vậy, không được cạo bỏ chất này và chỉ tháo lớp màng bảo vệ trước khi lắp đặt. Nếu không, trước khi lắp bộ tản nhiệt, hãy trét vài giọt keo dẫn nhiệt vào khe hở CPU nơi sẽ gắn bộ tản nhiệt vào. Đảm bảo keo được tra vào với một lớp đủ mỏng.

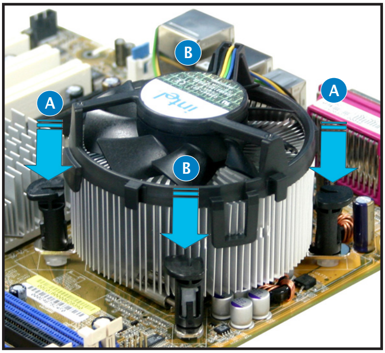


Để tránh làm bẩn keo dẫn nhiệt, KHÔNG được tra nó trực tiếp bằng ngón tay.

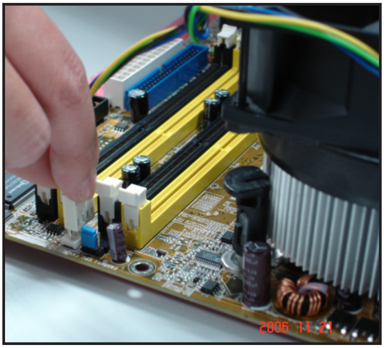
3. Xác định mỗi chốt khóa với đầu hẹp của đường rãnh hướng ra ngoài.



4. Ấn hai chốt khóa cùng lúc theo trình tự hình chéo để siết chặt bộ tản nhiệt và quạt đúng cách.



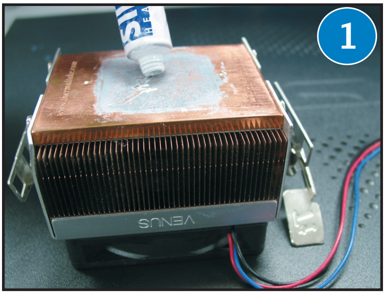
5. Cắm cáp quạt CPU vào đầu nối tương ứng trên bo mạch chủ.

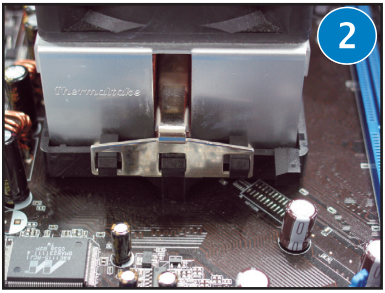


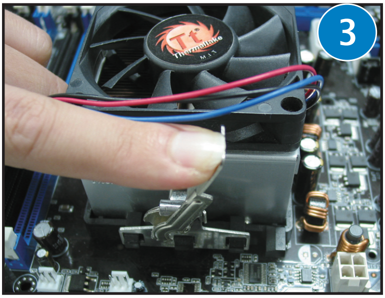
ĐỪNG quên cắm đầu nối quạt CPU! Các lỗi kiểm tra phần cứng có thể xảy ra nếu bạn không cắm đầu nối này vào và chúng tôi đề nghị bạn sử dụng bộ tản nhiệt đa hướng để có được phạm vi xua tan hơi nóng tối đa.

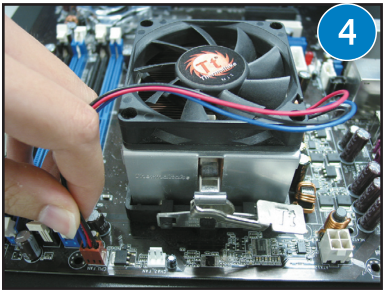
Đối với bộ tản nhiệt do AMD chứng nhận:

Thực hiện theo các hướng dẫn bên dưới để lắp bộ tản nhiệt do AMD chứng nhận.







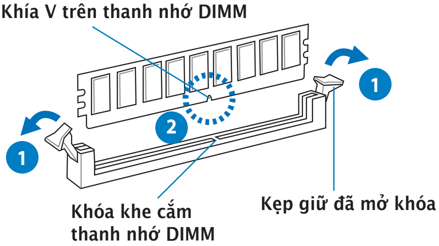


1.3 Lắp đặt thanh nhớ DIMM

Đảm bảo ngắt nguồn điện trước khi lắp hoặc tháo các thanh nhớ DIMM hay các phụ kiện hệ thống khác. Nếu không có thể gây thiệt hại nghiêm trọng cho cả bo mạch chủ và các phụ kiện.

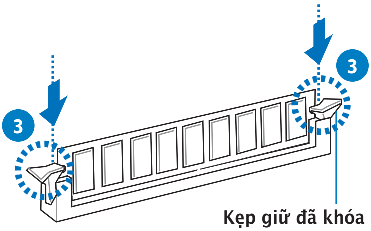
Lắp thanh nhớ DIMM vào đế cắm kẹp đôi

1. Mở khóa đế cắm thanh nhớ DIMM bằng cách đẩy các kẹp giữ hướng ra ngoài.
2. Canh chỉnh thanh nhớ DIMM trên đế cắm để khía chữ V trên thanh nhớ DIMM khớp với khóa khe cắm thanh nhớ DIMM trên đế cắm.



Thanh nhớ DIMM được khóa bằng khía V để nó lắp khít chỉ theo một hướng. KHÔNG được ép thanh nhớ DIMM vào đế cắm theo hướng không đúng để tránh làm hỏng thanh nhớ DIMM.

3. Giữ thanh nhớ DIMM bằng cả hai đầu ngón tay rồi lắp thẳng thanh nhớ DIMM vào đế cắm. Ép cùng lúc cả hai đầu thanh nhớ DIMM cho đến khi các kẹp giữ khóa chặt lại và thanh nhớ DIMM không thể bị đẩy ra thêm để đảm bảo cách lắp đặt thanh nhớ DIMM đúng cách.

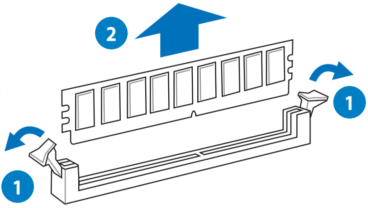


Luôn lắp THẲNG thanh nhớ DIMM vào đế cắm để tránh làm hỏng khía chữ V trên thanh nhớ DIMM.

- Để lắp từ hai thanh nhớ DIMM trở lên, hãy tham khảo sổ tay sử dụng có trong hộp đựng bo mạch chủ.
- Tham khảo sổ tay sử dụng để có được danh sách đại lý bán thanh nhớ ủy quyền.

Tháo thanh nhớ DIMM khỏi đế cắm kẹp đôi

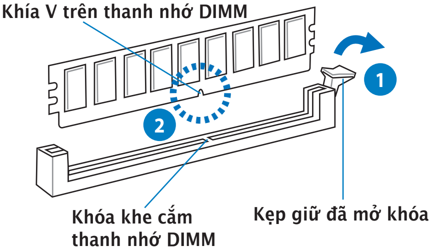
1. Đồng thời ấn các kẹo giữ hướng ra ngoài để mở khóa thanh nhớ DIMM.
2. Tháo thanh nhớ DIMM khỏi đế cắm.



Đỡ nhẹ thanh nhớ DIMM bằng các ngón tay khi ấn các kẹp giữ. Thanh nhớ DIMM có thể bị hỏng nếu nó bị bật ra ngoài bởi một lực khác.

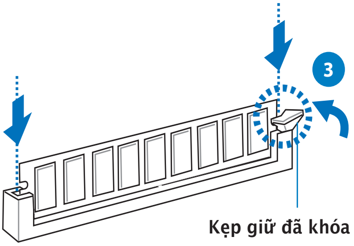
Lắp thanh nhớ DIMM vào đế cắm kẹp đơn

1. Mở khóa đế cắm thanh nhớ DIMM bằng cách đẩy các kẹp giữ hướng ra ngoài.
2. Canh chỉnh thanh nhớ DIMM trên đế cắm để khía chữ V trên thanh nhớ DIMM khớp với khóa khe cắm thanh nhớ DIMM trên đế cắm.



Thanh nhớ DIMM được khóa bằng khía V để nó lắp khít chỉ theo một hướng. KHÔNG được ép thanh nhớ DIMM vào đế cắm theo hướng không đúng để tránh làm hỏng thanh nhớ DIMM.

3. Giữ thanh nhớ DIMM bằng cả hai đầu ngón tay rồi lắp thẳng thanh nhớ DIMM vào đế cắm. Ép cùng lúc cả hai đầu thanh nhớ DIMM cho đến khi các kẹp giữ khóa chặt lại và thanh nhớ DIMM không thể bị đẩy ra thêm để đảm bảo cách lắp đặt thanh nhớ DIMM đúng cách.

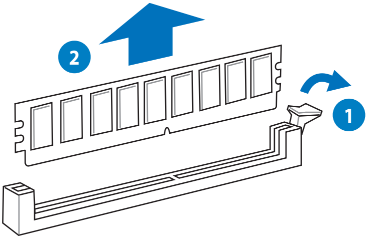


Luôn lắp THẲNG thanh nhớ DIMM vào đế cắm để tránh làm hỏng khía chữ V trên thanh nhớ DIMM.

- Để lắp từ hai thanh nhớ DIMM trở lên, hãy tham khảo sổ tay sử dụng có trong hộp đựng bo mạch chủ.
- Tham khảo sổ tay sử dụng để có được danh sách đại lý bán thanh nhớ ủy quyền.

Tháo thanh nhớ DIMM khỏi đế cắm kẹp đơn

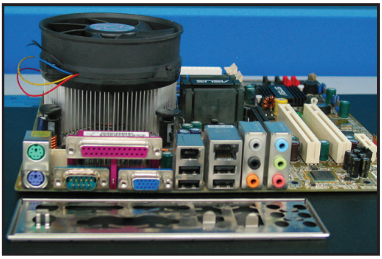
1. Đồng thời ấn các kẹo giữ hướng ra ngoài để mở khóa thanh nhớ DIMM
2. Tháo thanh nhớ DIMM khỏi đế cắm.



Đỡ nhẹ thanh nhớ DIMM bằng các ngón tay khi ấn các kẹp giữ. Thanh nhớ DIMM có thể bị hỏng nếu nó bị bật ra ngoài bởi một lực khác.

1.4 Lắp bo mạch chủ

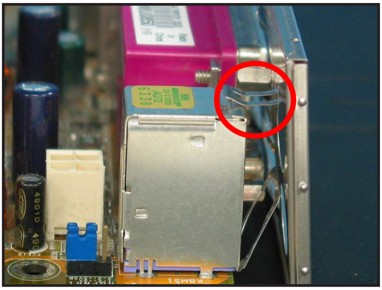
1. Các cổng ra/vào (I/O) khác với bo mạch chủ. Sử dụng và lắp tấm chắn bảo vệ đầu ra/vào phía sau chỉ được bán kèm với hộp đựng bo mạch chủ.



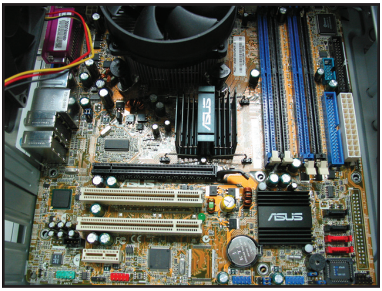
Một số cạnh sắc và đầu nhọn có thể gây tổn thương cho cơ thể. Chúng tôi đề nghị bạn mang găng tay chống cắt hay đâm thủng trước khi lắp bo mạch chủ và tấm chắn bảo vệ đầu ra/vào.

2. Lắp các bộ cách điện vào lỗ vít tương ứng trên thanh kim loại.

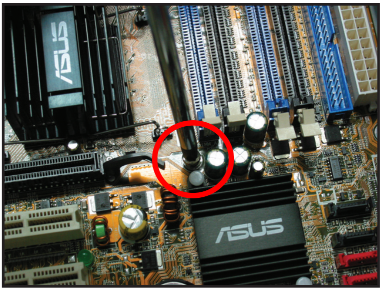
3. Các lò xo cạnh tấm chắn bảo vệ đầu ra/vào có thể làm hỏng các cổng ra/vào. Phải cẩn thận khi lắp tấm chắn bảo vệ đầu ra/vào.



4. Xác định vị trí mặt ra/vào bo mạch chủ ở phía sau vỏ máy và lắp bo mạch chủ vào vỏ máy.



5. Trước tiên lắp và siết lỏng mỗi đinh vít theo trình tự hình chéo. Sau khi đã lắp xong mọi đinh vít, hãy vặn các đinh vít cho đến khi chúng được siết chặt.



- Bạn có thể tháo các nắp đậy khe cắm kim loại cho các card mở rộng ở mặt sau vỏ máy trước khi lắp bo mạch chủ. Đối với một số mẫu vỏ máy, có thể rất khó để tháo nắp đậy khe cắm mở rộng sau khi lắp đặt.
- ĐỪNG siết các đinh vít quá chặt. Điều này có thể làm hỏng bo mạch chủ.

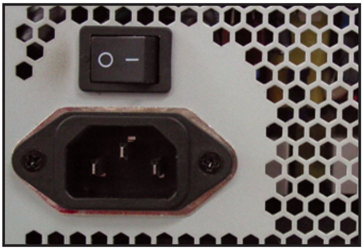
1.5 Lắp bộ nguồn

Có hai loại bộ nguồn thông dụng. Một loại là Hiệu chỉnh Hệ số Điện năng (PFC) trực tiếp và loại kia là PFC gián tiếp.

1. Chọn bộ nguồn.

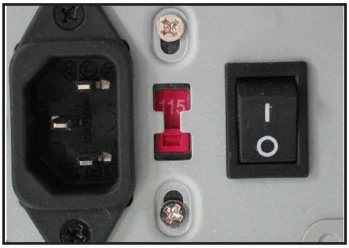
Bộ nguồn có PFC gián tiếp:

PFC gián tiếp đòi hỏi người dùng tự chỉnh điện áp đầu vào AC.

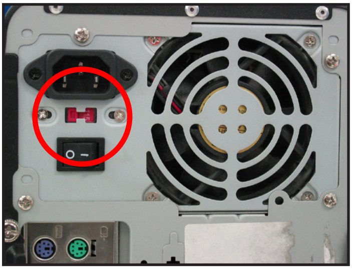


Bộ nguồn có PFC trực tiếp:

PFC trực tiếp tự động hiệu chỉnh điệp áp đầu vào AC.



2. Nếu bạn đang sử dụng bộ nguồn có PFC gián tiếp, hãy chỉnh sang điện áp đầu vào AC tại khu vực của bạn.



Không chỉnh bộ nguồn sang điện áp đầu vào AC thích hợp sẽ làm hỏng nghiêm trọng hệ thống.

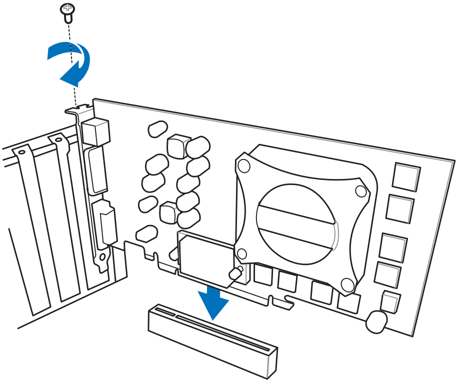
Chỉ nên sử dụng các bộ nguồn có chứng nhận an toàn. Dùng các bộ nguồn không ổn định có thể làm hỏng bo mạch chủ và các phụ kiện khác của bạn. Tham khảo sổ tay hướng dẫn sử dụng các bộ nguồn đáp ứng các yêu cầu của bo mạch chủ.

1.6 Lắp card mở rộng

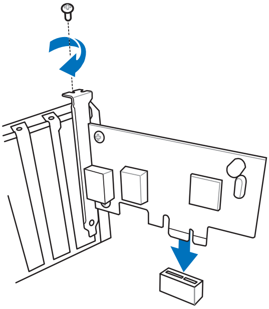
Để lắp card mở rộng:

1. Tháo nắp đậy khe cắm kim loại đối diện với khe cắm card mở rộng nơi bạn muốn lắp card mở rộng.
2. Lắp card mở rộng và đảm bảo nó được lắp đúng cách vào khe cắm.
3. Vặn vít để siết chặt card trên khe cắm.
4. Lặp lại các bước ở trên để lắp thêm card mở rộng khác.

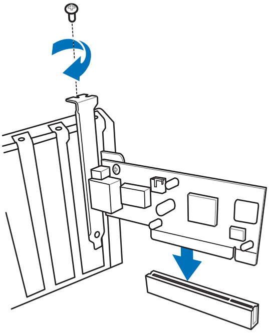
Card PCIE x16



Card PCIE x1



Card PCI (Tương kết phụ kiện ngoại vi)



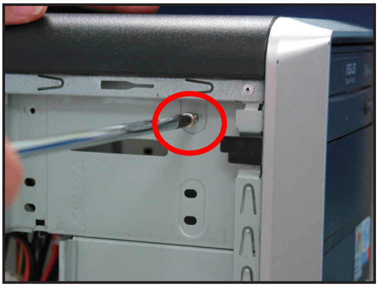
- Tham khảo tài liệu về card để có các chi tiết cấu hình card, và sổ tay hướng dẫn sử dụng bo mạch chủ trong trường hợp bạn cần định cấu hình bất kỳ cầu nối nhảy cóc nào sau khi lắp card mở rộng.
- Tham khảo sổ tay hướng dẫn sử dụng bo mạch chủ để có các hướng dẫn về cách kết nối cáp tín hiệu cho card mở rộng.

1.7 Lắp các ổ đĩa

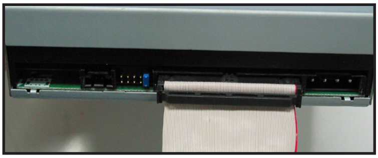
1.7.1 Ổ đĩa quang PATA

1. Tháo nắp đậy giả và trượt ổ đĩa quang vào khung giữ.

2. Canh chỉnh các lỗ vít và siết chặt ổ đĩa bằng các đinh vít.

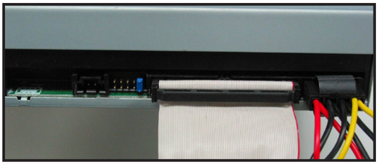


3. Xác định và cắm cáp IDE vào ổ đĩa quang. Dải màu đỏ trên cáp IDE là đầu cuối lỗ cắm 1 và phải khớp với chân cắm 1 đánh dấu lõm trên ổ đĩa quang.

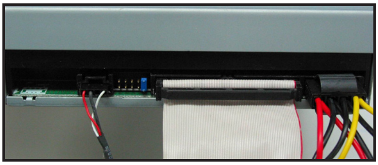


Các cáp IDE có thể chống giả mạo. Không được ép cáp IDE vào đầu nối.

4. Nối cáp nguồn 4 lỗ vào ổ đĩa quang.



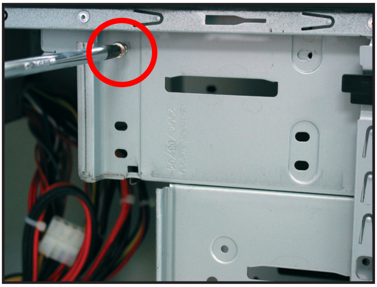
5. Gắn cáp âm thanh vào đầu nối trên ổ đĩa quang.



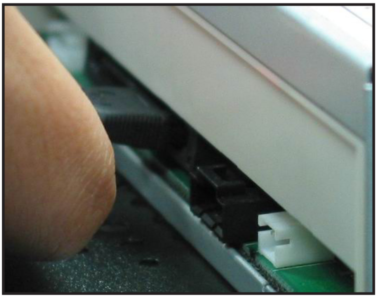
1.7.2 Ổ đĩa quang SATA

1. Tháo nắp đậy giả và trượt ổ đĩa quang vào khung giữ.

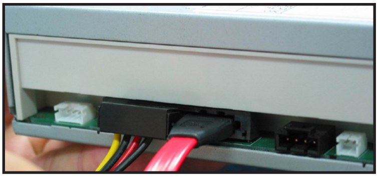
2. Canh chỉnh các lỗ vít và siết chặt ổ đĩa bằng các đinh vít.



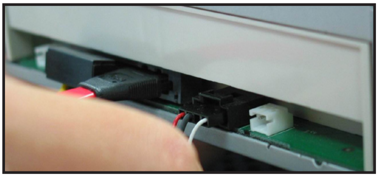
3. Xác định và cắm cáp SATA vào ổ đĩa quang. Các cáp SATA có thể chống giả mạo. Không được ép cáp SATA vào đầu nối.



4. Nối cáp nguồn SATA vào ổ đĩa quang.

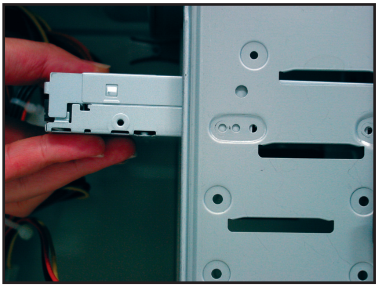


5. Gắn cáp âm thanh vào đầu nối trên ổ đĩa quang.

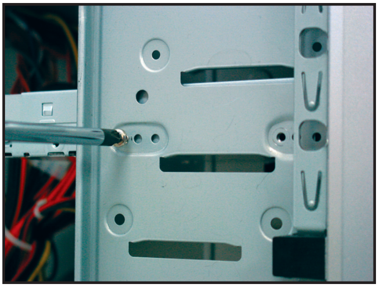


1.7.3 Ổ đĩa mềm

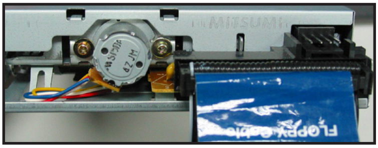
1. Tháo nắp đậy giả và lắp ổ đĩa mềm vào khung giữ.



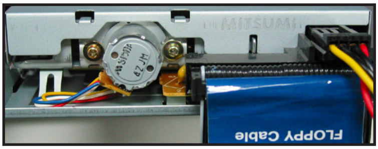
2. Canh chỉnh các lỗ vít và siết chặt ổ đĩa bằng các đinh vít.



3. Xác định và cắm cáp đĩa mềm vào ổ đĩa. Dải màu đỏ trên cáp IDE là đầu cuối lỗ cắm 1 và phải khớp với chấn cắm 1 trên ổ đĩa mềm.

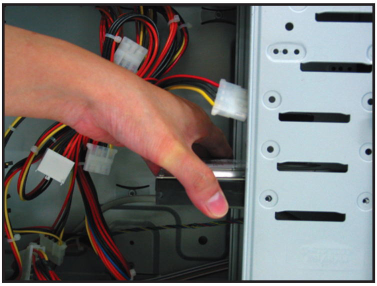


4. Cắm cáp nguồn ổ đĩa mềm vào đầu nối ở mặt sau ổ đĩa mềm.



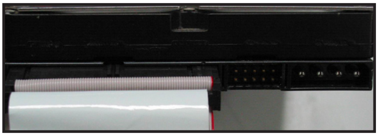
1.7.4 Ổ đĩa cứng PATA

1. Lắp ổ đĩa cứng PATA vào khung giữ.

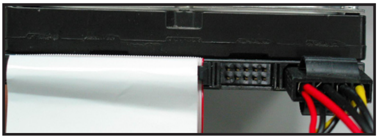


2. Canh chỉnh các lỗ vít và siết chặt ổ đĩa bằng các đinh vít.

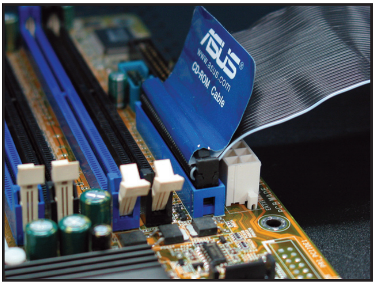
3. Xác định và cắm cáp tín hiệu vào ổ đĩa cứng. Dải màu đỏ trên cáp là đầu cuối lỗ cắm 1. Khớp với rãnh cắm chống giả mạo và không được ép cáp vào đầu nối.



4. Cắm cáp nguồn 4 lỗ vào đầu nối ở mặt sau ổ đĩa cứng.

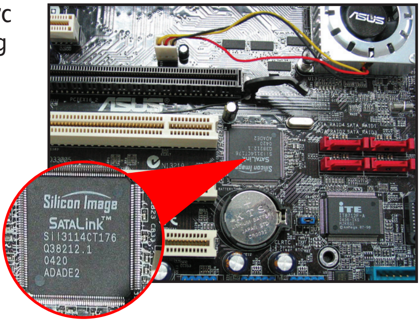


5. Gắn đầu kia của cáp tín hiệu với khe cắm tương ứng trên bo mạch chủ.

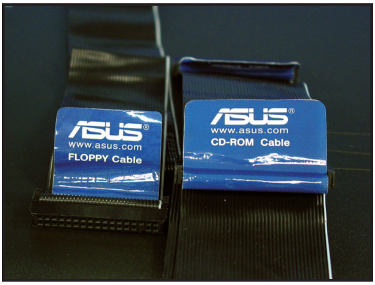


Các lưu ý để lắp ổ đĩa cứng PATA

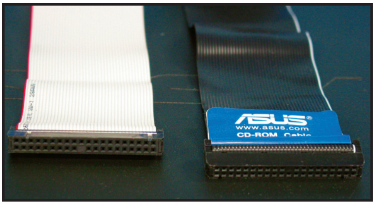
- Nếu hệ điều hàng của bạn được lắp vào ổ đĩa cứng do Hệ thống đĩa Dự phòng (RAID) hay các bộ điều khiển khác điều khiển, trước tiên bạn phải lắp driver điều khiển vào ổ đĩa cứng.


Silicon Image
SATALink™
SII3114CT176
Q38212.1
0420
ADADE2

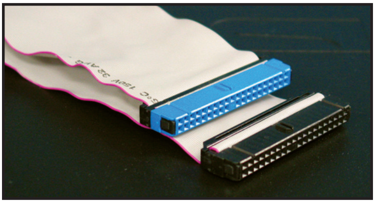
- Đầu nối cáp được mã hóa màu. Đầu nối màu xanh dành cho đầu nối chủ và đầu nối màu đen/xám dành cho ổ đĩa chính/phụ.


ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

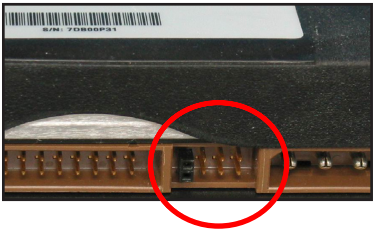
- Có hai loại cáp dành cho các ổ đĩa ATA IDE, các cáp 80 dây mới hơn (phải) và 40 dây cũ hơn (trái). Đối với các ổ đĩa ATA66/100/133, chỉ cáp 80 dây mới có thể mang lại hiệu suất tốt hơn. Cáp 40 dây thường dùng cho các ổ đĩa quang.


ASUS
www.asus.com
CD-ROM Cable

- Các loại cáp được thiết kế với thẻ kéo. Chỉ cần lắp các ổ đĩa dễ dàng dựa vào những thẻ trên cáp. Để tránh làm hỏng các chân cắm, hãy rút cáp ra bằng cách kéo các thẻ trên cáp.

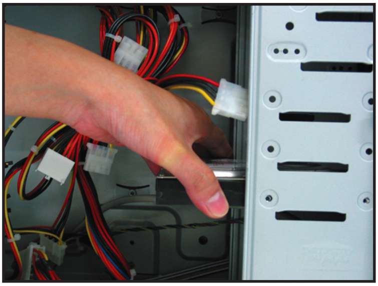


- Khi nối hai thiết bị IDE, bạn phải cài đặt các cầu nối nhảy cóc vào vị trí khác nhau, một vào vị trí chính và một vào vị trí phụ. Nếu đang sử dụng cáp 80 dây, bạn có thể dùng kiểu chọn cáp.

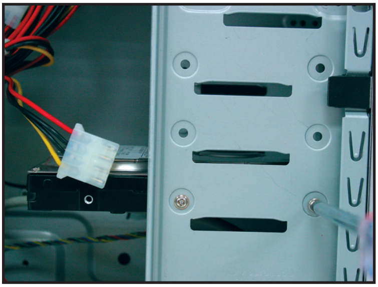

S/N: 7DB00P31

1.7.5 Ổ đĩa cứng SATA

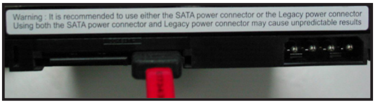
1. Lắp ổ đĩa cứng SATA vào vào khung giữ.



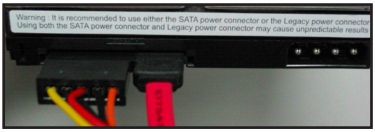
2. Canh chỉnh các lỗ vít và siết chặt ổ đĩa bằng các đinh vít.



3. Xác định và cắm cáp SATA vào ổ đĩa cứng. Cáp chỉ có thể lắp vừa theo một hướng thích hợp.

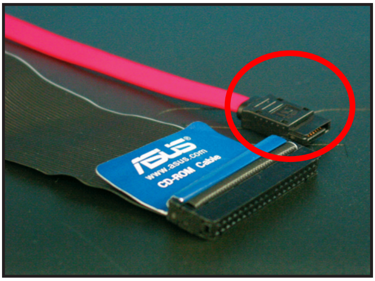

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

4. Cắm cáp nguồn SATA vào đầu nối ở mặt sau ổ đĩa cứng.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Các lưu ý để lắp ổ đĩa cứng SATA

- Giao diện ATA (SATA) nối tiếp mang lại tốc độ truyền dữ liệu nhanh hơn và dung sai điện áp tốt hơn. Kiểu thiết kế nhỏ gọn của cáp SATA cũng giải quyết các vấn đề kết nối cáp và cho phép nhiều lưu lượng khí hơn trong vỏ máy.


ASUS
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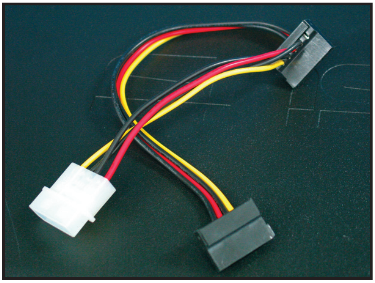
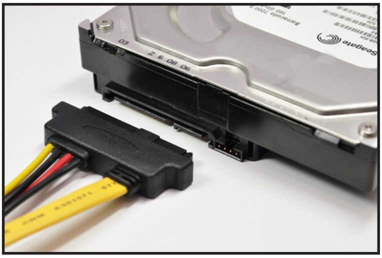
CD-ROM Cable

- Đầu nối cáp nguồn SATA khác với đầu nối nguồn 4 lỗ truyền thống. Bo mạch chủ ASUS tích hợp các cáp chỉnh hợp nguồn điện cho bạn trong trường hợp bộ nguồn của bạn không chứa đầu nối mới này.

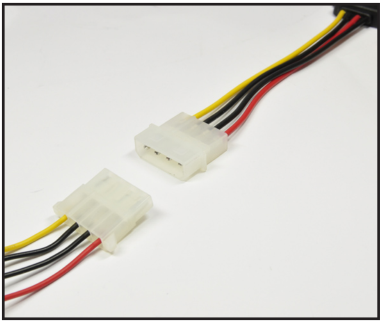


1.7.6 Ổ đĩa cứng SAS

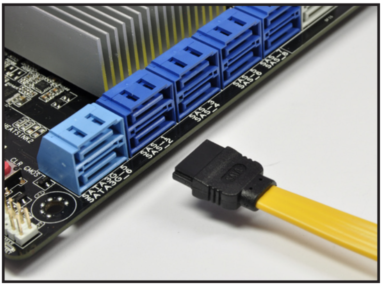
1. Định hướng và kết nối cáp tổng hợp nguồn/tín hiệu SAS với ổ đĩa cứng. Cáp chỉ có thể lắp vừa theo một hướng thích hợp.



2. Cắm cáp nguồn SAS vào đầu nối nguồn trên bộ nguồn.



3. Cắm cáp tín hiệu SAS vào đầu nối SAS trên bo mạch chủ.

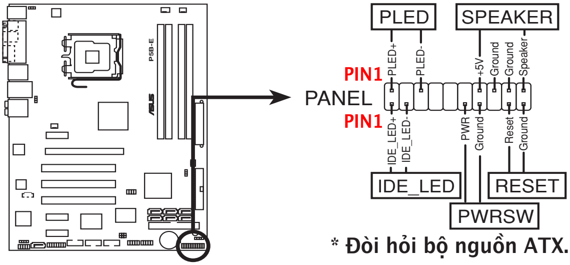


1.8 Các cáp mặt trước

Để nối các cáp mặt trước:

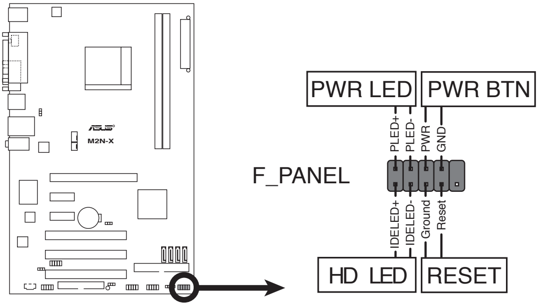
- RESET (Khởi động lại công tắt)
- PLED (Đèn LED nguồn)
- PWRSW (Công tắt nguồn)
- IDE_LED (Đèn LED bật ổ đĩa cứng IDE)
- SPEAKER (Đầu cắm loa)

Đầu nối mặt trước 20 – 8 lỗ


P5B-E
ASUS
PLED
SPEAKER
PIN1
PLED+
PLED-
+5V
Ground
Ground
Speaker
PANEL
PIN1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

*** Đòi hỏi bộ nguồn ATX.**

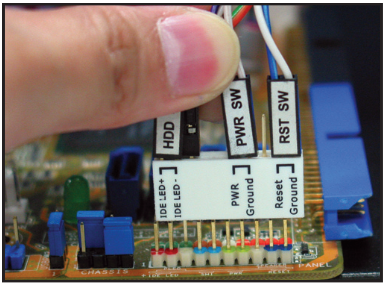
Đầu nối mặt trước 10–1 lỗ


ASUS
M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- Các cáp mặt trước vỏ máy của bạn có thể khác với các mẫu hay kiểu dáng. Cắm các đầu nối này vào bo mạch chủ theo nhãn.
- Nếu các đèn LED không sáng lên và vị trí chân cắm đúng, bạn có thể cắm sai các chân cắm tiếp đất với các chân cắm tín hiệu. Thông thường dây màu trắng đại diện cho các chân cắm tiếp đất và dây có mã màu dành cho các chân cắm tín hiệu.
- Các cáp mặt trước LOA, KHỞI ĐỘNG LẠI và Công tắt nguôn không có hướng cụ thể trong khi các cáp Đèn LED bật ổ đĩa cứng IDE và Đèn LED nguồn lại có. Hãy cắm LỖ CẮM 1 của cáp vào CHÂN CẮM 1 của đầu nối trên bo mạch chủ.
- Đầu nối mặt trước khác với mẫu bo mạch chủ của bạn, hãy tham khảo sổ tay hướng dẫn sử dụng để biết thêm thông tin.

Đầu nối ASUS Q-Connector

Lắp đặt bước một của Đầu nối ASUS Q-Connector giúp bạn tiết kiệm thời gian từ việc vật lộn với các sợi cáp mặt trước rối rắm. Tham khảo sổ tay hướng dẫn sử dụng để biết thêm chi tiết.

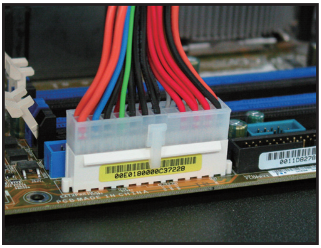


Đầu nối Q-connector có sẵn cho các mẫu đã chọn. Tham khảo sổ tay hướng dẫn sử dụng để thêm biết chi tiết.

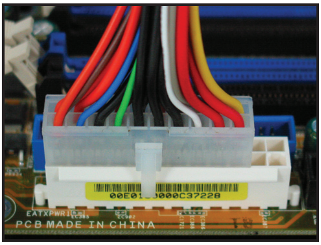
1.9 Nối nguồn điện ATX

Các đầu nố nguồn điện ATX (Mở rộng Công nghệ Nâng cao) chỉ có thể lắp theo một hướng thích hợp. Sử dụng kẹp phụ để móc các đầu nối vào bo mạch chủ. KHÔNG được ép các đầu nối nguồn điện dương vào các chân cắm âm tương ứng trên bo mạch chủ. Thông thường sẽ có hai đầu nối trên bo mạch chủ, đầu nối nguồn điện 14 lỗ và 4 lỗ. Một số bộ nguồn kiểu cũ có thể chỉ có đầu nối nguồn điện 20 lỗ cũng tương thích với đầu nối 24 chân cắm trên bo mạch chủ.

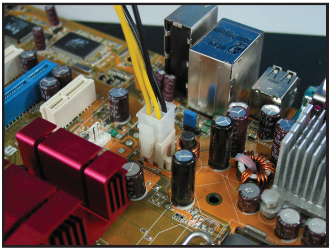
Đầu nối nguồn điện 24 lỗ



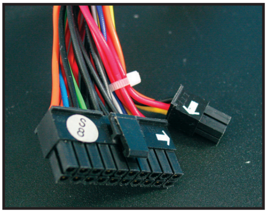
Đầu nối nguồn điện 20 lỗ (trên đầu nối âm 24 chân cắm)

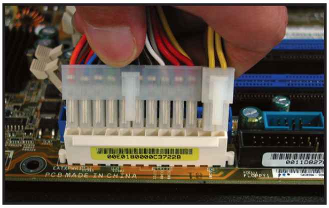


Đầu nối nguồn điện 4 lỗ



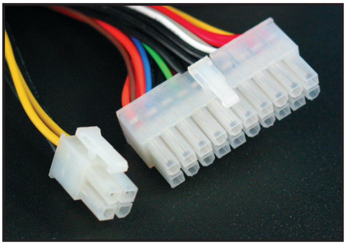
- KHÔNG được nối nguồn điện AC ngoại vi khi cắm các đầu nối nguồn điện vào bo mạch chủ.
- Đảm bảo các đầu nối nguồn điện phải được cắm chặt vào bo mạch chủ.
- Nếu bộ nguồn của bạn hỗ trợ 20 lỗ + 4 lỗ, bạn có thể kết hợp hai đầu nối này và lắp vào các đầu nối 24 chân cắm trên bo mạch chủ.



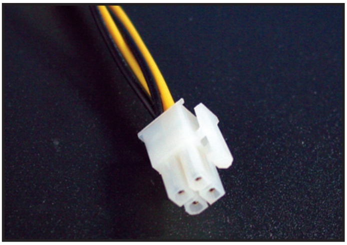


Đầu nối nguồn điện

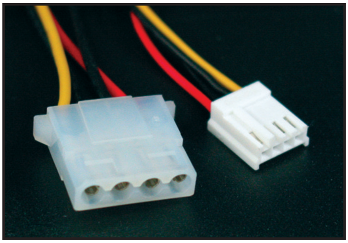
Đầu nối ATX 20+4 (24) lỗ



Đầu nối ATX 4 lỗ

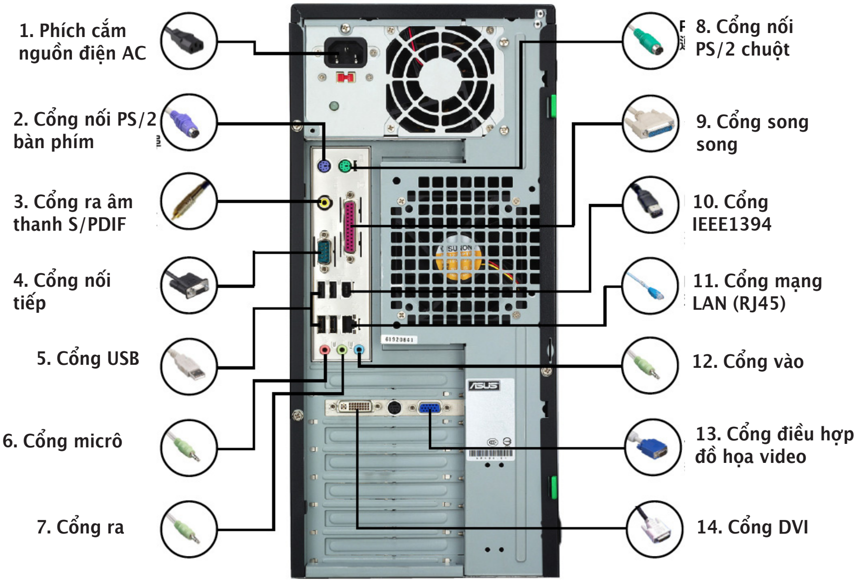


đầu nối nguồn điện ngoại vi (trái)
đầu nối nguồn điện ổ đĩa mềm (phải)



1.10 Các thiết bị và phụ kiện ngoại vi

Tham khảo hình bên dưới để nối các thiết bị và phụ kiện ngoại vi.


1. Phích cắm nguồn điện AC
2. Cổng nối PS/2 bàn phím
3. Cổng ra âm thanh S/PDIF
4. Cổng nối tiếp
5. Cổng USB
6. Cổng micrô
7. Cổng ra
8. Cổng nối PS/2 chuột
9. Cổng song song
10. Cổng IEEE1394
11. Cổng mạng LAN (RJ45)
12. Cổng vào
13. Cổng điều hợp đồ họa video
14. Cổng DVI

1. Phích cắm nguồn điện AC + cáp mở rộng nguồn điện

2. Cổng PS/2 bàn phím + bàn phím

3. Cổng ra âm thanh S/PDIF + hệ thống loa kỹ thuật số 5.1

4. Cổng nối tiếp + giá sạc PDA

5. Cổng USB + các thiết bị USB

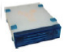
6. Cổng micrô + micrô

7. Cổng ra + loa

8. Cổng PS/2 chuột + chuột

9. Cổng song song + máy in

10. Cổng IEEE1394 + ổ đĩa cứng ngoại vi



11. Cổng mạng LAN (RJ45) + modem

12. Cổng vào + máy thu âm

13. Cổng VGA + màn hình CRT

14. Cổng DVI + màn hình LCD

Các đầu nối mặt sau khác nhau theo từng mẫu. Tham khảo sổ tay hướng dẫn sử dụng để biết thêm chi tiết.

1.11 Khởi động lần đầu

Lúc này hệ thống chạy chức năng tự kiểm tra khi bật nguồn hay POST. Khi các lần kiểm tra đang chạy, BIOS sẽ phát ra tiếng bíp (xem bảng mã tiếng bíp BIOS bên dưới)

Tiếng bíp BIOS	Mô tả
Một tiếng bíp liên tục kèm theo ba tiếng bíp ngắn	Không tìm thấy VGA (mảng đồ họa video)
Một tiếng bíp liên tục kèm theo hai tiếng tiếp ngắn sau đó tạm dừng (được lặp lại)	Không tìm thấy bộ nhớ
Một tiếng bíp liên tục kèm theo bốn tiếng bíp ngắn	Lỗi phụ kiện phần cứng (BIOS AMI)
Bốn tiếng bíp ngắn	Lỗi phụ kiện phần cứng (BIOS AWARD)

Khắc phục sự cố

Lỗi	Thao tác
• Không thể bật máy tính • Đèn LED nguồn không sáng. • Quạt bộ nguồn không hoạt động.	Đảm bảo dây nguồn đã được nối đúng cách.
Máy tính đang bật nhưng màn hình lại màu đen.	• Đảm bảo nguồn điện màn hình đang bật và cáp VGA được nối đúng cách. • Chỉnh độ sáng và độ tương phản màn hình. • Tắt máy tính và tháo dây nguồn ra. Kiểm tra xem card VGA đã được lắp chặt chưa.
Không tìm thấy bộ nhớ	• Đảm bảo thanh bộ nhớ được lắp đúng cách • Đảm bảo các thanh DIMM đã được gắn chặt trên đế cắm thanh DIMM. • Đảm bảo thanh bộ nhớ được mùa từ danh sách đại lý bán hàng ủy quyền. Tham khảo sổ tay hướng dẫn sử dụng để có danh sách đại lý bán hàng ủy quyền.
Lỗi ổ đĩa mềm (Đèn báo luôn sáng, thông báo hệ điều hành bật lên trên màn hình).	• Kiểm tra cấu hình BIOS về ổ đĩa mềm. • Đảm bảo các cáp dùng cho ổ đĩa mềm phải được cắm vào đúng cách.
Lỗi ổ đĩa cứng/ổ đĩa quang (không nhận dạng hay tìm thấy)	• Đảm bảo cài đặt cầu nối nhảy cóc đúng cách. (Chính/Phụ) • Kiểm tra cấu hình BIOS về ổ đĩa cứng/ổ đĩa quang. • Đảm bảo các cáp thiết bị đã được gắn chặt. • Đảm bảo các driver thiết bị đã được lắp đặt.

Chương 2: Quản lý/cập nhật BIOS

2.1 Trình tiện ích AFUDOS

Trình tiện ích AFUDOS cho phép bạn cập nhật tập tin BIOS trong môi trường DOS bằng cách sử dụng đĩa mềm có thể khởi động với tập tin BIOS vừa cập nhật. Trình tiện ích này cũng cho phép bạn chép tập tin BIOS hiện hành để có thể dùng làm bản sao dự phòng khi BIOS bị lỗi hay bị hỏng trong quá trình cập nhật.

Chép BIOS hiện hành

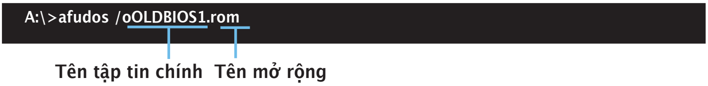
Để chép tập tin BIOS hiện hành qua trình tiện ích AFUDOS:

- Đảm bảo đĩa mềm không được chống sao chép và có dung lượng trống tối thiểu 1024KB để lưu lại tập tin.
- Các màn hình BIOS kế tiếp chỉ dùng để tham khảo. Hiển thị màn hình BIOS thực có thể không giống như hình minh họa.

1. Chép trình tiện ích AFUDOS (afudos.exe) từ đĩa DVD hỗ trợ bo mạch chủ sang đĩa mềm có thể khởi động mà bạn đã tạo lúc đầu.
2. Khởi động hệ thống ở chế độ DOS, sau đó tại dấu nháy hãy nhập:

   afudos /o[tên tập tin]

   nơi [tên tập tin] là bất kỳ tên tập tin nào do người dùng chọn không quá 8 ký tự chữ số cho tên tập tin chính và 3 ký tự chữ số cho tên mở rộng.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Nhấn <Enter>. Trình tiện ích sẽ chép tập tin BIOS hiện hành vào đĩa mềm.

```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
    Reading flash ..... done
    Write to file...... ok
A:\>
```

   Trình tiện ích sẽ trở về dấu nháy DOS sau khi chép tập tin BIOS hiện hành.

Cập nhật tập tin BIOS

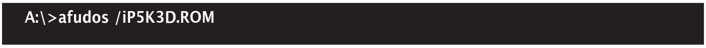
Để cập nhật tập tin BIOS qua trình tiện ích AFUDOS:

1. Vào trang web của ASUS (www.asus.com) và tải về tập tin BIOS mới nhất cho bo mạch chủ. Lưu tập tin BIOS vào đĩa mềm có thể khởi động.

Viết tên tập tin BIOS lên mẫu giấy. Bạn cần nhập tên tập tin BIOS chính xác tại dấu nháy DOS.

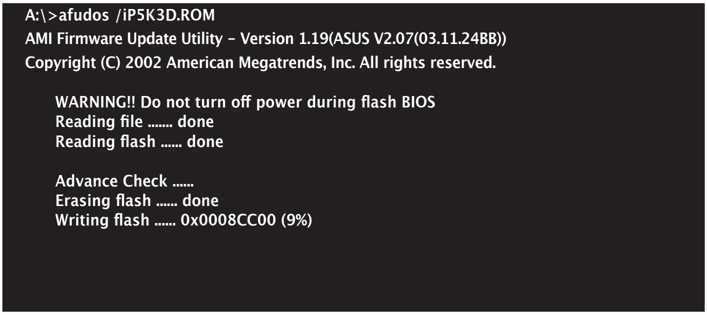
2. Chép trình tiện ích AFUDOS (afudos.exe) từ đĩa DVD hỗ trợ bo mạch chủ sang đĩa mềm có thể khởi động mà bạn đã tạo lúc đầu.
3. Khởi động hệ thống ở chế độ DOS, sau đó tại dấu nháy hãy nhập: **afudos /i[tên tập tin]**

   nơi [tên tập tin] là tập tin BIOS gốc hay mới nhất trên đĩa mềm có thể khởi động.



```
A:\>afudos /iP5K3D.ROM
```

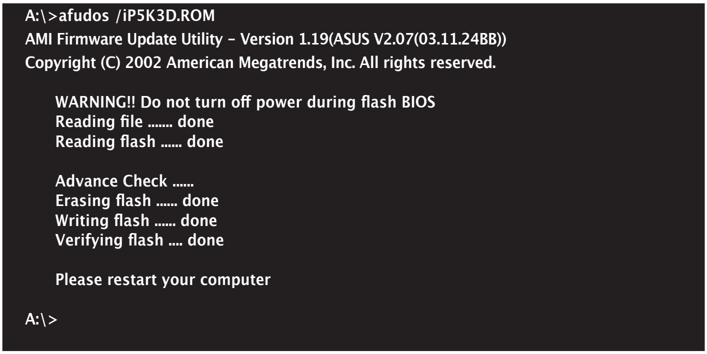
4. Trình tiện ích xác nhận tập tin và bắt đầu cập nhật BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... 0x0008CC00 (9%)
```

Viết tên tập tin BIOS lên mẫu giấy. Bạn cần nhập tên tập tin BIOS chính xác tại dấu nháy DOS.

5. Trình tiện ích trở về dấu nháy DOS sau khi hoàn tất quá trình cập nhật BIOS. Khởi động lại hệ thống từ ổ đĩa cứng.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file ....... done
    Reading flash ...... done

    Advance Check ......
    Erasing flash ...... done
    Writing flash ...... done
    Verifying flash .... done

    Please restart your computer

A:\>
```

2.2 Trình tiện ích AwardBIOS Flash

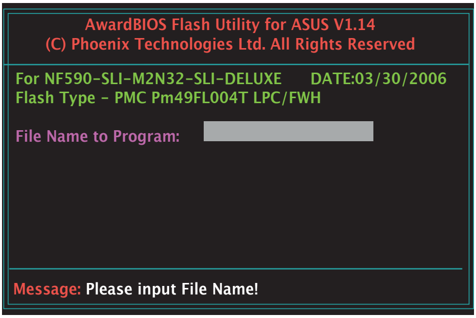
Cập nhật BIOS

Có thể cập nhật Hệ thống đầu Ra/Vào Cơ bản (BIOS) qua Trình tiện ích AwardBIOS Flash. Thực hiện theo các hướng dẫn này để cập nhật BIOS qua trình tiện ích này.

1. Tải về tập tin BIOS mới nhất từ trang web của ASUS. Đổi tên tập tin sang M2N32SLI.BIN và lưu nó vào đĩa mềm, đĩa CD hay đĩa USB ở **Định dạng FAT 16/12.**

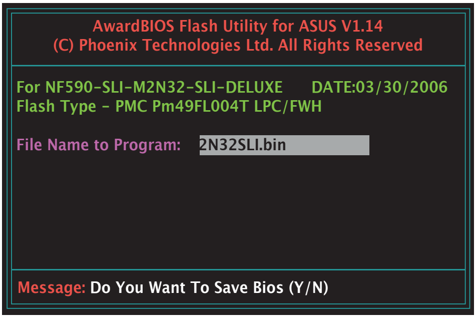
Chỉ lưu lại tập tin BIOS vừa cập nhật vào đĩa để tránh tải tập tin BIOS sai.

2. Chép Trình tiện ích AwardBIOS Flash (awdflash.exe) từ thư mục Software trên đĩa CD hỗ trợ vào đĩa mềm, đĩa CD hay đĩa USB với tập tin BIOS mới nhất.
3. Khởi động hệ thống ở chế độ DOS qua đĩa mềm có thể khởi động, đĩa CD hay đĩa USB mà bạn đã tạo lúc đầu.
4. Dưới chế độ DOS, hãy sử dụng <X:> (X đại diện cho tên được gán trên đĩa) để chuyển sang thư mục trên đĩa mềm, đĩa CD hay đĩa USB nơi bạn đã lưu tập tin BIOS và Trình tiện ích AwardBIOS Flash.
5. Tại dấu nháy, hãy nhập awdflash rồi nhấn <Enter>. Màn hình Trình tiện ích AwardBIOS Flash sẽ hiển thị.



```
              AwardBIOS Flash Utility for ASUS V1.14
        (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE      DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

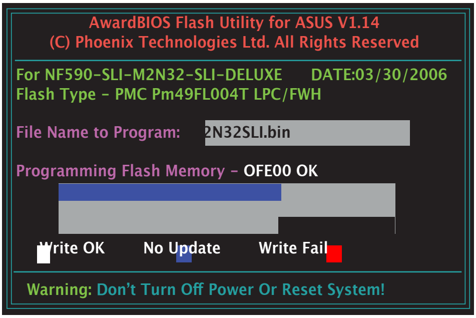
6. Nhập tên tập tin BIOS vào mục File Name to Program, sau đó nhấn <Enter>.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:    2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

7. Nhấn <N> khi trình tiện ích nhắc bạn lưu lại tập tin BIOS hiện hành. Màn hình sau đây sẽ hiển thị.

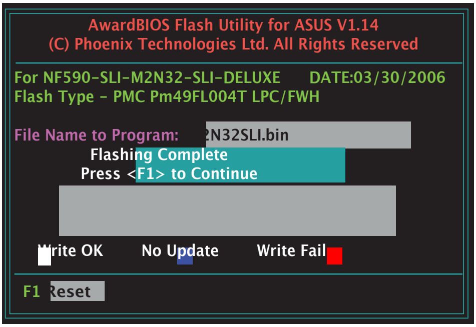
8. Trình tiện ích xác nhận tập tin BIOS trong đĩa mềm, đĩa CD hay đĩa USB và bắt đầu tải nhanh tập tin BIOS.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:    2N32SLI.bin

Programming Flash Memory - OFE00 OK

  Write OK      No Update      Write Fail

Warning: Don't Turn Off Power Or Reset System!
```

KHÔNG được tắt hay khởi động lại hệ thống trong quá trình tải nhanh!

9. Trình tiện ích hiển thị thông báo Flashing Complete cho biết bạn đã tải nhanh thành công tập tin BIOS. Rút đĩa ra rồi nhấn phím <F1> để khởi động lại hệ thống.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:    2N32SLI.bin
           Flashing Complete
         Press <F1> to Continue

  Write OK      No Update      Write Fail

F1  Reset
```

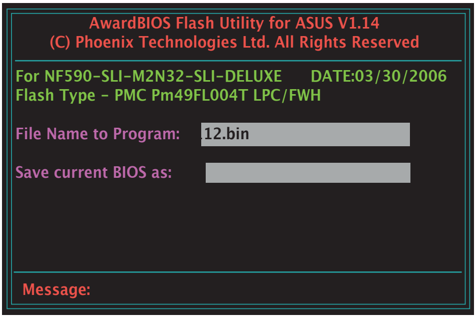
Lưu tập tin BIOS hiện hành

Bạn có thể sử dụng Trình tiện ích AwardBIOS Flash để lưu lại tập tin BIOS hiện hành. Bạn có thể tải tập tin BIOS hiện hành khi bị hỏng trong quá trình tải nhanh.

Đảm bảo đĩa mềm, đĩa CD hay đĩa USB có đủ dung lượng đĩa để lưu tập tin.

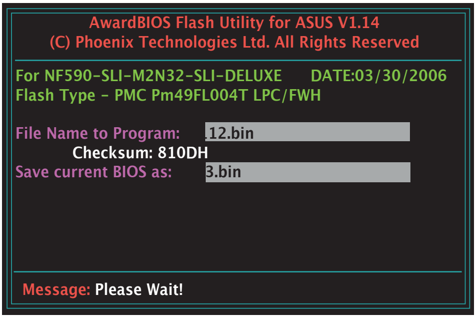
Để lưu tập tin BIOS hiện hành qua Trình tiện ích AwardBIOS Flash:

1. Thực hiện theo các bước từ 1-6 ở phần trước.
2. Nhấn <Y> khi trình tiện ích nhắc bạn lưu lại tập tin BIOS hiện hành. Màn hình sau đây sẽ hiển thị.



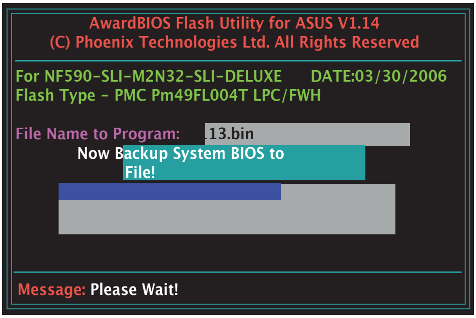
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:   12.bin

Save current BIOS as:

Message:
```

3. Nhập tên cho tập tin BIOS hiện hành vào mục Save current BIOS as, sau đó nhấn <Enter>.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:   12.bin
        Checksum: 810DH
Save current BIOS as:   3.bin

Message: Please Wait!
```

4. Trình tiện ích lưu lại tập tin BIOS hiện hành vào đĩa, sau đó trở về quá trình tải nhanh BIOS.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:   13.bin
         Now Backup System BIOS to
             File!

Message: Please Wait!
```

2.3 Trình tiện ích ASUS Update

ASUS Update là một trình tiện ích cho phép bạn quản lý, lưu lại và cập nhật BIOS bo mạch chủ trong môi trường Windows®. Trình tiện ích ASUS Update cho phép bạn:

- Lưu tập tin BIOS hiện hành
- Tải về tập tin BIOS mới nhất từ Internet
- Cập nhật BIOS từ tập tin BIOS vừa cập nhật
- Cập nhật BIOS trực tiếp từ Internet và
- Xem thông tin phiên bản BIOS.

Trình tiện ích này có sẵn trong đĩa DVD hỗ trợ kèm theo hộp đựng bo mạch chủ.

ASUS Update cần phải kết nối Internet qua mạng hay Nhà cung cấp Dịch vụ Internet (ISP).

Cài đặt ASUS Update

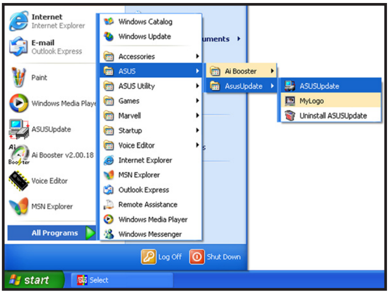
Để cài ASUS Update:

1. Lắp đĩa DVD hỗ trợ vào ổ đĩa quang. Menu Driver sẽ hiển thị.
2. Từ menu **Main (Chính)**, click thẻ Utilities, sau đó click vào Install ASUS Update VX.XX.XX.
3. Trình tiện ích ASUS Update sẽ được chép vào hệ thống của bạn.

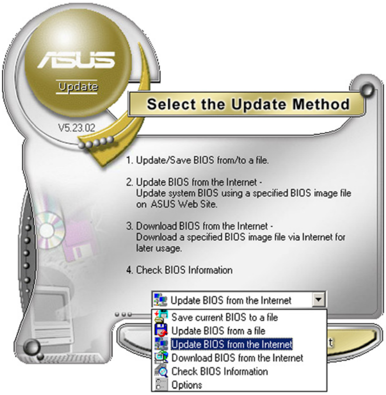
Cập nhật BIOS qua Internet

Để cập nhật BIOS qua Internet:

1. Bật trình tiện ích ASUS Update từ desktop của Windows® bằng cách click **Start** > **Programs** > **ASUS** > **ASUSUpdate** > **ASUSUpdate**. Cửa sổ chính ASUS Update sẽ hiển thị.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

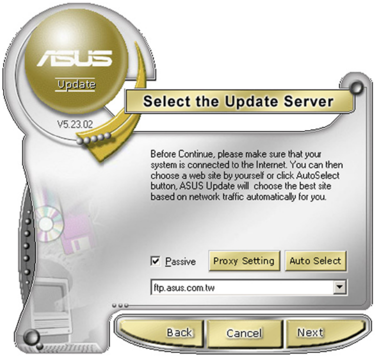
2. Chọn **Update BIOS from the Internet (Cập nhật BIOS từ Internet)** từ menu sổ xuống và sau đó click **Next (Kế tiếp)**.


ASUS
Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Chọn trang FTP của AUS gần bạn nhất để tránh nghẽn mạng hoặc click **Auto Select**. Click **Next.**


ASUS
Update
V5.23.02
Select the Update Server

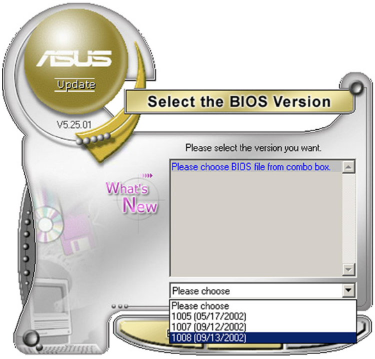
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. Từ trang FTP, chọn phiên bản BIOS mà bạn muốn tải về. Click **Next**.


ASUS
Update
V5.25.01
Select the BIOS Version
What's New

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

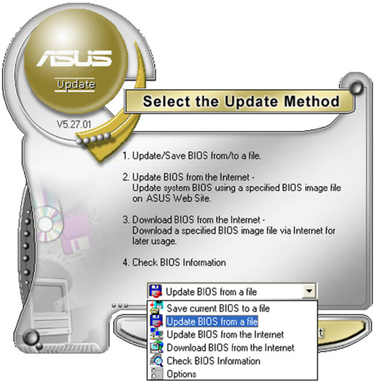
5. Thực hiện theo các hướng dẫn trên màn hình để hoàn tất quá trình cập nhật.

Trình tiện ích ASUS Update có thể tự cập nhật qua Internet. Luôn cập nhật trình tiện ích để tận dụng mọi tính năng của nó.

Cập nhật BIOS qua tập tin BIOS

Để cập nhật BIOS qua tập tin BIOS:

1. Bật trình tiện ích ASUS Update từ desktop của Windows® bằng cách click **Start**> **Programs** > **ASUS** > **ASUSUpdate** > **ASUSUpdate**. Cửa sổ chính ASUS Update sẽ hiển thị.
2. Chọn **Update BIOS from a file (Cập nhật BIOS từ file)** từ menu sổ xuống, sau đó click **Next (Kế tiếp)**.


ASUS
Update
V5.27.01

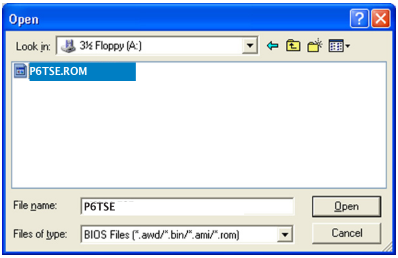
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from a file

Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Xác định tập tin BIOS từ cửa sổ Open, sau đó click **Open**.
4. Thực hiện theo các hướng dẫn trên màn hình để hoàn tất quá trình cập nhật.


Open
Look in:
Open
Cancel

Look in: 3½ Floppy (A:)

P6TSE.ROM

File name: P6TSE

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Chắc chắn đã nạp các cài đặt BIOS mặc định để đảm bảo sự tương thích và ổn định cho hệ thống. Chọn mục **Load Setup Defaults (Nạp giá trị cài đặt mặc định)** trong menu **Exit (Thoát)**.

2.4 Trình cập nhật BIOS của ASUS

Trình cập nhật BIOS của ASUS cho phép bạn cập nhật BIOS trong môi trường DOS. Trình tiện ích này cũng cho phép bạn chép file BIOS hiện hành để có thể dùng làm bản sao lưu khi BIOS bị lỗi hay bị hỏng trong quá trình cập nhật.

Các màn hình trình tiện ích kế tiếp chỉ dùng để tham khảo. Hiển thị màn hình trình tiện ích thực có thể không giống như hình minh họa.

Trước khi cập nhật BIOS

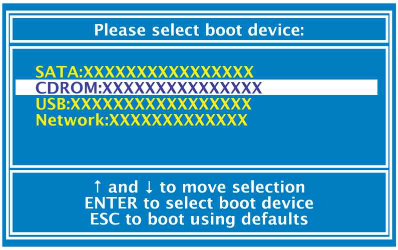
1. Chuẩn bị đĩa DVD hỗ trợ bo mạch chủ và driver USB flash ở định dạng FAT32/16 và phân phu đơn.
2. Tải về file và Trình cập nhật BIOS mới nhất từ website của ASUS tại http://support.asus.com và lưu chúng vào ổ đĩa USB flash.

- NTFS không được hỗ trợ trong môi trường DOS. Không lưu file và Trình cập nhật BIOS vào ổ đĩa cứng hay ổ đĩa USB flash ở định dạng NTFS.
- Không lưu file BIOS vào đĩa mềm vì dung lượng đĩa thấp.

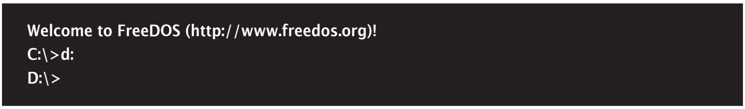
3. Tắt máy tính và ngắt kết nối mọi ổ đĩa cứng SATA (tùy chọn).

Khởi động hệ thống ở môi trường DOS

1. Lắp ổ đĩa USB flash chứa File và Trình cập nhật BIOS mới nhất vào cổng USB.
2. Khởi động máy tính. Khi logo ASUS hiển thị, nhấn phím <F8> để hiển thị **BIOS Boot Device Select Menu (Menu chọn thiết bị khởi động BIOS)**. Lắp đĩa DVD hỗ trợ vào ổ đĩa quang và chọn ổ đĩa quang làm thiết bị khởi động.


Please select boot device:
SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX
↑ and ↓ to move selection
ENTER to select boot device
ESC to boot using defaults

3. Khi menu **Make Disk (Tạo đĩa)** hiển thị, chọn mục **FreeDOS command prompt (Thông báo lệnh FreeDOS)** bằng cách nhập số cho mục này.
4. Tại dấu nháy hệ điều hành FreeDOS, nhập chữ **d:** và nhấn phím <Enter> để chuyển đổi đĩa từ Ổ đĩa C (ổ đĩa quang) sang Ổ đĩa D (ổ đĩa USB flash).



```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Sao lưu BIOS hiện hành

Để sao lưu file BIOS hiện hành qua Trình cập nhật BIOS

Đảm bảo ổ đĩa USB flash đã được hủy chức năng chống sao chép và có đủ dung lượng trống để lưu file này.

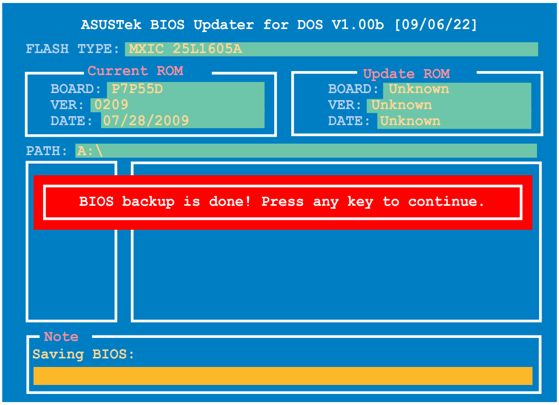
1. Tại dấu nháy hệ điều hành FreeDOS, nhập **bupdater /o[tên file]** và nhấn phím <Enter>.

```
D:\>bupdater /oOLDBIOS1.rom
```

Đuôi mở rộng **Tên file**

[Tên file] là bất kỳ tên file nào do người dùng chọn không quá 8 ký tự chữ số cho tên file chính và 3 ký tự chữ số cho tên mở rộng.

2. Màn hình sao lưu Trình cập nhật BIOS hiển thị quá trình sao lưu BIOS. Khi đã sao lưu xong BIOS, hãy nhấn bất kỳ phím nào để trở về dấu nháy DOS.



```
        ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
     Current ROM                      Update ROM
   BOARD: P7P55D                    BOARD: Unknown
   VER: 0209                        VER: Unknown
   DATE: 07/28/2009                 DATE: Unknown
PATH: A:\

     BIOS backup is done! Press any key to continue.

  Note
Saving BIOS:
```

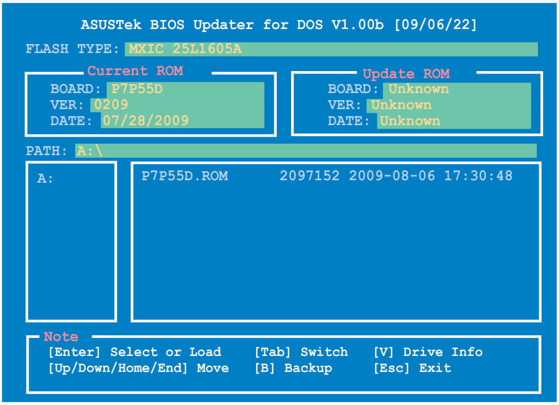
Cập nhật file BIOS

Để cập nhật file BIOS qua Trình cập nhật BIOS

1. Tại dấu nháy hệ điều hành FreeDOS, nhập **bupdater /pc /g** và nhấn phím <Enter>.

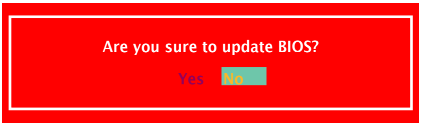
```
D:\>bupdater /pc /g
```

2. Màn hình Trình cập nhật BIOS sẽ hiển thị như sau.



```
          ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
            Current ROM                      Update ROM
   BOARD: P7P55D                      BOARD: Unknown
   VER: 0209                          VER: Unknown
   DATE: 07/28/2009                   DATE: Unknown
PATH: A:\
  A:          P7P55D.ROM        2097152 2009-08-06 17:30:48

  Note
   [Enter] Select or Load    [Tab] Switch    [V] Drive Info
   [Up/Down/Home/End] Move   [B] Backup      [Esc] Exit
```

3. Nhấn phím <Tab> để chuyển qua các mục trên màn hình và dùng các phím <Lên/Xuống/Home/End> để chọn file BIOS và nhấn phím <Enter>. Trình cập nhật BIOS sẽ kiểm tra file BIOS đã chọn và yêu cầu bạn xác nhận việc cập nhật BIOS.



```
Are you sure to update BIOS?
        Yes   No
```

4. Chọn **Yes (Có)** và nhấn phím <Enter>. Khi cập nhật xong BIOS, hãy nhấn phím <ESC> để thoát Trình cập nhật BIOS. Khởi động lại máy tính.

KHÔNG được tắt hoặc khởi động lại máy trong khi cập nhật BIOS để tránh lỗi khởi động máy!

- Đối với Trình cập nhật BIOS phiên bản 1.04 hoặc mới hơn, trình tiện ích này sẽ tự động thoát để về dấu nháy DOS sau khi cập nhật BIOS.
- Chắc chắn đã nạp các cài đặt BIOS mặc định để đảm bảo sự tương thích và ổn định cho hệ thống. Chọn mục Load Setup Defaults (Nạp các giá trị cài đặt mặc định) trong menu Exit (Thoát) BIOS. Xem Chương 3 của sổ tay sử dụng bo mạch chủ của bạn để biết thêm chi tiết.
- Đảm bảo kết nối mọi ổ đĩa cứng SATA sau khi cập nhật file BIOS nếu bạn đã ngắt kết nối chúng.

Chương 3: Khắc phục sự cố

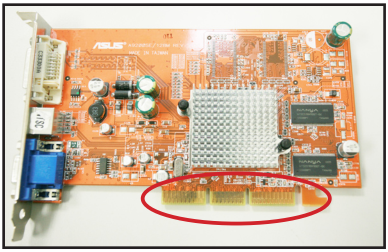
3.1 Tự khắc phục sự cố cho Bo mạch chủ

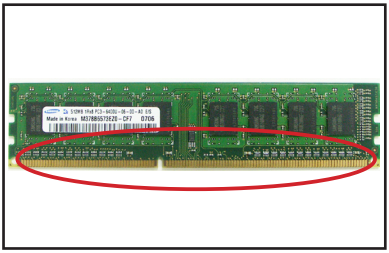
Sau khi lắp ráp máy tính riêng, bạn có thể gặp phải những sự cố khi khởi động máy. Chương này cung cấp các giải đáp cho một số câu hỏi thông dụng về PC của bạn trước khi vào hệ điều hành. Đọc chương này để khắc phục sự cố cơ bản. Điều này giúp tiết kiệm thời gian và tránh các bối rối cho bạn khi liên hệ với nhóm hỗ trợ kỹ thuật ASUS hay gửi lại sản phẩm để được bảo hành.

3.1.1 Khắc phục sự cố cơ bản

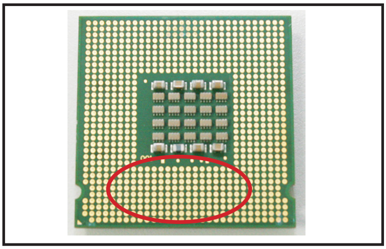
A. Kết nối sai

1. Đảm bảo không có các chất bẩn trên tiếp điểm màu vàng hay các lỗ cắm.
2. Sử dụng chổi bông hay giẻ lau để lau nhẹ tiếp điểm màu vàng. Nhớ lau sạch các mảnh vụn giẻ lau.





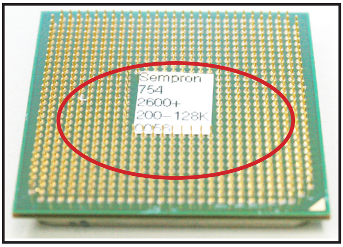
Tiếp điểm màu vàng của thanh DIMM



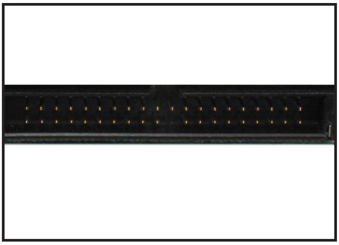
Các tiếp điểm màu vàng của bộ xử lý LGA775

Cầm card hay CPU qua các cạnh của nó và KHÔNG được chạm vào tiếp điểm màu vàng. Sự tĩnh điện sẽ làm hỏng nghiêm trọng thiết bị.

3. Đảm bảo không có các chân cắm bị vỡ hay cong trên chân cắm đầu nối hay chân cắm CPU. Chân cắm bị vỡ hay cong sẽ làm hỏng phụ kiện. Liên hệ với đại lý bán lẻ của bạn để được hỗ trợ thêm.



Các chân cắm màu vàng từ CPU AMD

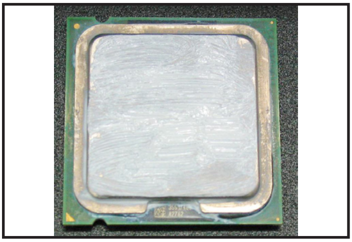


Các chân cắm đầu nối

Nếu có các chân cắm bị vỡ hay cong sau khi mua, đại lý bán lẻ của bạn có thể yêu cầu thêm phí sửa chữa. Thỉnh thoảng, các chân cắm bị vỡ hay cong KHÔNG THỂ SỬA CHỮA.

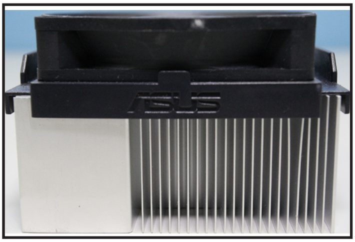
B. CPU quá nóng

1. Lau sạch bề mặt CPU bằng vải sạch. Trét vài giọt keo dẫn nhiệt vào khe hở của CPU nơi sẽ gắn bộ tản nhiệt vào. Đảm bảo keo được tra vào với một lớp đủ mỏng.

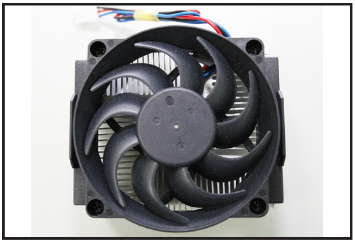


Bề mặt CPU

2. Đảm bảo không có các chất bẩn trên bộ tản nhiệt và quạt.



Nhìn từ hông bộ tản nhiệt và quạt



Nhìn từ trên bộ tản nhiệt và quạt

3. Thực hiện theo các hướng dẫn từ nhà sản xuất bộ tản nhiệt và quạt để lau sạch các chất bẩn sẽ làm chậm tốc độ quay của quạt.

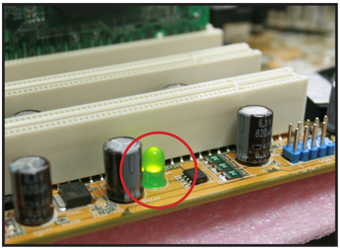
3.2 Các sự cố thông dụng khác

- Khi tháo các thiết bị khỏi hệ thống, đảm bảo đã ngắt mọi cáp nguồn.
- Mọi thông báo lỗi sẽ hiển thị trên màn hình trong khi Tự Kiểm tra Khi Bật nguồn (POST).
- Nếu có các tiếng bíp trên BIOS, hãy tham khảo phần 1.11 để biết thêm chi tiết.
- Xem kỹ bảng danh mục cần kiểm tra bên dưới để kiểm tra thêm.

	Kiểm tra các mục					
	Đèn LED nguồn	**Hiển thị màn hình**	**Bộ tản nhiệt và quạt**	**Các tiếng bíp BIOS**	**Thông báo lỗi**	**Trang tham khảo**
Không có điện	Tắt	Không	Dừng	Không	Không áp dụng	3-4
Không hiển thị màn hình	Bật	Không	Dừng	Không	Không áp dụng	3-5
	Bật	Không	Đang chạy	Không	Không áp dụng	3-5
	Bật	Không	Đang chạy	Có	Không áp dụng	3-5
Không thể vào hệ điều hành (OS)	Bật	Có	Đang chạy	Có	Có	3-5
	Bật	Có	Đang chạy	Không	Có	3-5
	Bật	Có	Đang chạy	Không	Không	3-5

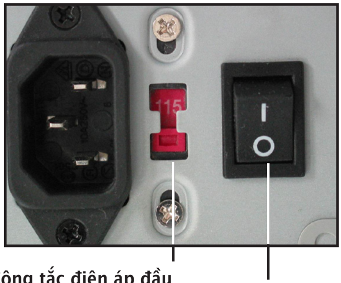
Nếu sự cố đã được khắc phục, nhưng xảy ra sự cố mới, hãy xem kỹ lại danh mục cần kiểm tra. Nếu sự cố vẫn tiếp diễn, hãy liên hệ với đại lý bán lẻ của bạn hay nhóm hỗ trợ kỹ thuật ASUS để được trợ giúp thêm.

3.2.1 Không có điện



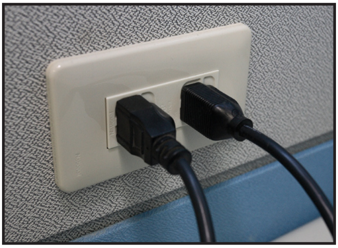
Các bo mạch chủ ASUS đi kèm với đèn LED nguồn chờ. Đèn LED sáng lên để chỉ hệ thống đang BẬT. Nếu đèn LED vẫn không sáng, hãy thực hiện theo các hướng dẫn bên dưới để khắc phục sự cố.

1. Đảm bảo đã chỉnh nguồn điện sang điện áp đầu vào AC thích hợp tại khu vực của bạn, và nguồn điện phải được bật.


115
Công tắc điện áp đầu vào AC
Công tắc nguồn "–": Bật; "O": Tắt

- Trước khi chỉnh điện áp đầu vào AC, đảm bảo đã rút phích cắm nguồn điện. Nếu không sẽ làm hỏng nghiêm trọng bộ nguồn.
- Không chỉnh bộ nguồn sang điện áp đầu vào AC thích hợp sẽ làm hỏng nghiêm trọng hệ thống.

2. Đảm bảo bạn đã cắm dây nguồn vào ổ cắm điện trên tường.
   - Cắm phích nguồn trực tiếp vào ổ cắm điện trên tường. KHÔNG được cắm nó vào đuôi mở rộng nguồn điện, bộ tích điện UPS hay các thiết bị khác.
   - Đổi các phích cắm nguồn của hệ thống và màn hình để kiểm tra xem ổ cắm điện trên tường có đang hoạt động bình thường không.



3. Nếu sự cố vẫn tiếp diễn, bạn có thể cần liên hệ với đại lý bán lẻ để có bộ nguồn mới. Nếu bộ nguồn hoạt động, hãy liên hệ với đại lý bán lẻ bo mạch chủ ASUS của bạn để được bảo hành bo mạch chủ.

3.2.2 Không thể khởi động; Không hiển thị màn hình

Hầu hết các trường hợp không thể khởi động và không hiển thị màn hình là do hỏng thiết bị hay lắp đặt không đúng. Thực hiện theo các hướng dẫn bên dưới để khắc phục sự cố.

1. Đảm bảo đã cắm mọi cáp nguồn gồm hệ thống và màn hình.
2. Xác định xem sự cố có xảy ra từ các thiết bị mở rộng không.
    - Tháo mọi card và thiết bị mở rộng. Chỉ sử dụng bo mạch chủ, màn hình, card VGA, các thanh bộ nhớ, bộ nguồn, bộ tản nhiệt và quạt, bàn phím và chuột để khởi động lại hệ thống.
    - Nếu hệ thống đang hoạt động bình thường, chính một trong các thiết bị mở rộng gây ra sự cố này. Cài lại lần lượt các thiết bị mở rộng mà bạn đã tháo về hệ thống và xác định thiết bị bị lỗi.
3. Xác định xem sự cố có xảy ra từ các thiết bị mở rộng cơ bản không.
    - Nếu có một số thiết bị dự phòng, bạn có thể thay lần lượt các thiết bị này để xác định thiết bị bị lỗi theo trình tự “thanh bộ nhớ, CPU, bo mạch chủ, ổ đĩa cứng/ổ đĩa quang, bàn phím/chuột”.

Khi bạn xác định thiết bị bị lỗi, hãy liên hệ với đại bán lẻ thiết bị để được trợ giúp.

3.2.3 Không thể vào hệ điều hành

1. Nếu sự cố xảy ra sau khi bạn cài phần cứng. Tháo phần cứng vừa cài và khởi động lại hệ thống. Nếu hệ thống đang hoạt động bình thường không có phần cứng, thiết bị có thể bị lỗi hay không tương thích với hệ thống. Liên hệ với đại lý bán lẻ thiết bị để được trợ giúp.
2. Nếu sự cố xảy ra sau khi bạn cài phần mềm hay driver. Thực hiện theo các hướng dẫn bên dưới để khắc phục sự cố.
    a. Vào hệ điều hành ở chế độ an toàn và tháo phần mềm hay driver liên quan.

    b. Liên hệ với công ty bán hệ điều hành để được hỗ trợ thêm.

    c. Nếu các hướng dẫn ở trên không thể khắc phục sự cố, bạn có thể cần định dạng ổ đĩa cứng và cài lại hệ điều hành mới.

3. Nếu sự cố xảy ra sau khi bạn đổi các cài đặt BIOS, hãy khởi động lại và vào BIOS để tải các cài đặt mặc định. Tham khảo sổ tay hướng dẫn sử dụng bo mạch chủ để biết thêm chi tiết.

4. Nếu sự cố xảy ra vì nhiễm vi rút máy tính hay hỏng các tập tin, hãy thực hiện theo các hướng dẫn bên dưới để khắc phục sự cố.
    a. Vào hệ điều hành ở chế độ an toàn và quét vi rút cho toàn bộ hệ thống qua ứng dụng chống vi rút.
    b. Liên hệ với công ty bán hệ điều hành để được hỗ trợ thêm.
    c. Nếu các hướng dẫn ở trên không thể khắc phục sự cố, bạn có thể cần định dạng ổ đĩa cứng và cài lại hệ điều hành mới.

3.2.4 Các câu hỏi thường gặp (FAQs)

H1: Bộ nhớ được thông báo trong POST khác với bộ nhớ đã cài đặt.

Đ1: Bộ nhớ đã thông báo sự khác nhau có thể do các thanh bộ nhớ bị lỗi hay cài đặt thanh DIMM không đúng. Đảm bảo các thanh DIMM đang trong tình trạng tốt và chúng được lắp đặt đúng cách. Tham khảo sổ tay hướng dẫn sử dụng bo mạch chủ để biết thêm chi tiết. Nếu bạn cài đặt bộ nhớ 4 GB và nó thông báo là 3.X GB, thì nó hoạt động bình thường.

H2. Hệ thống không thể tìm thấy ổ đĩa mềm, nhưng ổ đĩa mềm vẫn sáng.

Đ2: Các cáp ổ đĩa mềm đã bị lắp đặt sai. Đảm bảo dải màu đỏ trên cáp (đầu cuối lỗ cắm 1) và phải khớp với chân cắm 1 trên ổ đĩa mềm.

H3: Không thể vào hệ điều hành sau khi lắp vào ổ đĩa USB hay các ổ đĩa cứng ngoại vi.

Đ3: Khi hệ thống tìm thấy ổ đĩa USB hay các ổ đĩa cứng giao diện USB, nó có thể thay đổi ưu tiên thiết bị khởi động. Tháo các thiết bị USB và khởi động lại hệ thống.

H4: Khi cài đặt Windows XP, máy không thể xác định các ổ đĩa cứng đã cài vào bộ điều khiển RAID.

Đ4: Windows XP không bao gồm driver điều khiển RAID, vì vậy máy không thể phát hiện các ổ đĩa cứng. Chép driver điều khiển RAID vào đĩa mềm và khi khởi động hệ thống bằng đĩa chứa Windows XP, nhấn phím <F6> để đọc driver từ đĩa mềm. Tham khảo sổ tay hướng dẫn sử dụng bo mạch chủ để biết thêm chi tiết.

Chương 4: Lời khuyên bảo dưỡng máy tính

4.1 Bảo dưỡng PC đúng cách

PC của bạn giống như các thiết bị gia đình khác. Đặt máy tính của bạn xa môi trường ẩm ướt, ánh nắng và nguồn tĩnh điện. Bạn không được di chuyển máy tính khi đang bật để tránh bị hỏng. Bụi bẩn bên trong sẽ làm ảnh hưởng đến hoạt động của ổ đĩa và góp phần gây ra sự cố quá nóng sẽ làm hỏng máy tính hoặc các phụ kiện.

4.2 Kiến thức cơ bản

1. Đặt máy tính vào thùng với vỏ phủ chống bụi khi không sử dụng.
2. Khi sử dụng máy tính, không được đặt bất cứ thứ gì trên màn hình để bịt các lỗ thông gió. Nóng quá mức có thể làm hỏng màn hình.
3. Không được đặt máy tính gần tường và chừa một khoảng trống để xua tan hơi nóng. Nhiệt độ quá nóng sẽ làm hỏng hệ thống.
4. Đặt máy tính trên bề mặt cố định.
5. Đặt máy tính xa các khu vực có nhiệt độ quá mức. Từ 5°C – 30°C là nhiệt độ môi trường tốt nhất. Sử dụng máy điều hòa nhiệt độ hay quạt điện để giúp xua tan hơi nóng tốt hơn.
6. Xếp gọn các cáp ruy băng để tránh thiếu lưu lượng khí.

4.3 Kiến thức sử dụng

1. Bật và tắt máy tính thường xuyên. Nếu máy tính của bạn cần được bật trong thời gian dài, hãy sử dụng quạt hệ thống/CPU tốt hơn và bộ nguồn điện áp cao.
2. Mất điện đột xuất sẽ làm hỏng ổ đĩa cứng. Khi nguồn điện không ổn định, bạn nên lắp bộ tích điện UPS vào máy tính.
3. Sắp xếp lại các tập tin dữ liệu, quét vi rút, cập nhật phần mềm chống vi rút và chạy đĩa tiện ích DEFRAG thường xuyên.
4. Quét bụi và lau máy tính thường xuyên. (Rút mọi cáp nguồn trước khi lau máy)
    - Gỡ bỏ cài đặt bo mạch chủ và các ổ đĩa cứng/ổ đĩa quang, sau đó lau sạch chúng bằng bình xịt khí hay chổi mềm.
    - Quét sạch bụi bẩn và mãnh vỡ lông trên bộ nguồn bằng máy hút bụi chống tĩnh điện.

4.4 Lời khuyên

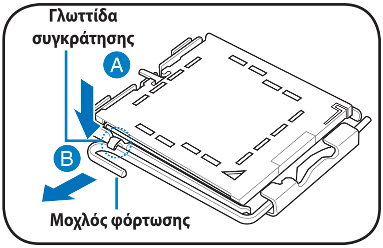
1. Nếu không sử dụng máy tính của bạn trong một thời gian dài, hãy đặt một số thiết bị hút hơi ẩm khô vào vỏ máy để tránh thiệt hại vì độ ẩm.
2. Ở một số khu vực có khí hậu nóng và ẩm ướt, bạn nên tắt máy tính hai lần một tuần. Điều này cũng có thể giúp tránh thiệt hại vì độ ẩm.

Κεφάλαιο 1: Γρήγορη εκκίνηση

1.1 Εγκατάσταση της CPU

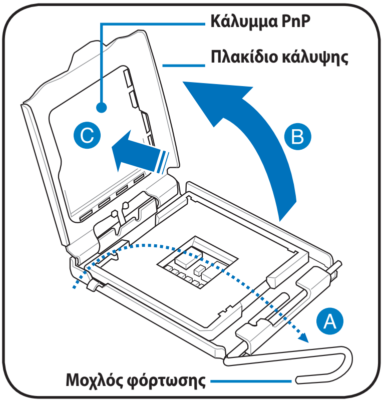
1.1.1 Υποδοχή Intel® LGA775

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.
2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα αριστερά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.


Γλωττίδα συγκράτησης
A
B
Μοχλός φόρτωσης

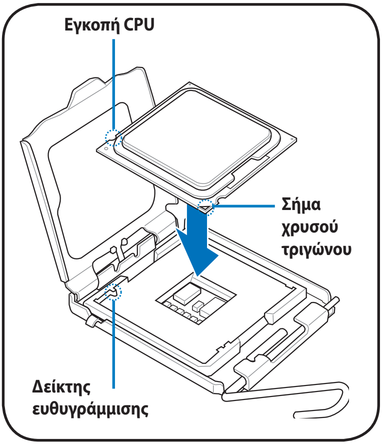
Για να αποφύγετε βλάβη στις ακίδες των υποδοχών μην αφαιρείτε το κάλυμμα PnP εκτός αν πρόκειται να εγκαταστήσετε μια CPU.

3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους σε γωνία 135º.
4. Ανασηκώστε το πλακίδιο κάλυψης με το άκρο του δακτύλου σας και το δείκτη σε γωνία 100º (4A), στη συνέχεια πιέστε το κάλυμμα PnP από το πλακίδιο κάλυψης για να το αφαιρέσετε (4B).


Κάλυμμα PnP
Πλακίδιο κάλυψης
C
B
A
Μοχλός φόρτωσης

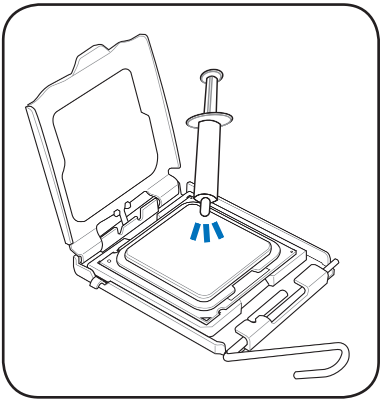
Ελληνικά

5. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και στερεώστε το δείκτη ακριβούς ευθυγράμμισης υποδοχής στην εγκοπή της CPU.



Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!

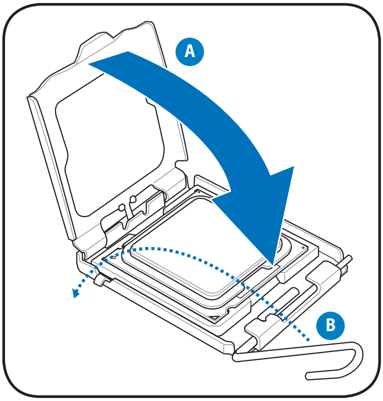
6. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

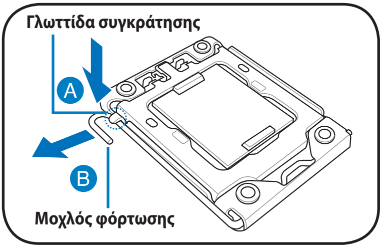
7. Κλείστε το πλακίδιο κάλυψης (A) και πίεστε το μοχλό φόρτωσης (B) μέχρι να ασφαλίσει στη γλωττίδα συγκράτησης.



1.1.2 Υποδοχή Intel® LGA1366

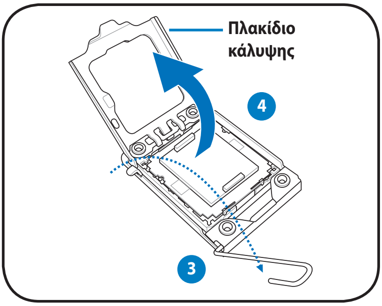
1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.

2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα αριστερά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.

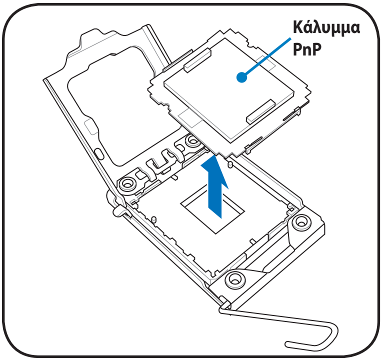

Γλωττίδα συγκράτησης
A
B
Μοχλός φόρτωσης

Για να αποφύγετε βλάβη στις ακίδες των υποδοχών μην αφαιρείτε το κάλυμμα PnP εκτός αν πρόκειται να εγκαταστήσετε μια CPU.

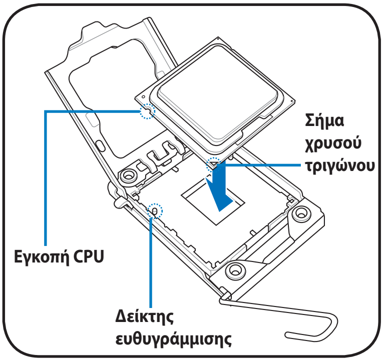
3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους σε γωνία 135º.
4. Ανασηκώστε το πλακίδιο κάλυψης με το άκρο του δακτύλου σας και το δείκτη σε γωνία 100º.


Πλακίδιο κάλυψης
4
3

5. Αφαιρέστε το κάλυμμα PnP από την υποδοχή CPU.

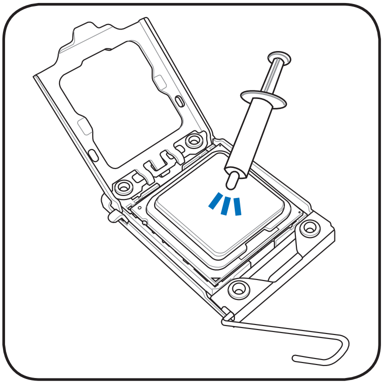

Κάλυμμα PnP

6. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και στερεώστε το δείκτη ακριβούς ευθυγράμμισης στην εγκοπή της CPU.



Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!

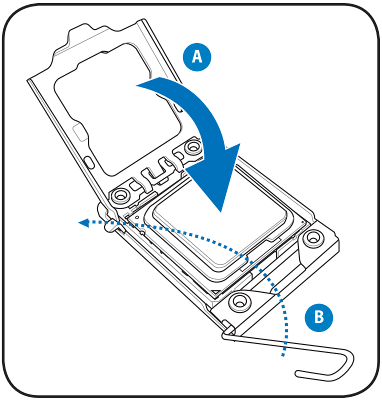
7. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

8. Κλείστε το πλακίδιο κάλυψης (A) και πίεστε το μοχλό φόρτωσης (B) μέχρι να ασφαλίσει στη γλωττίδα συγκράτησης.

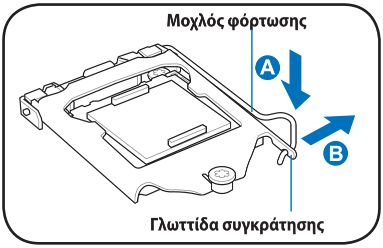


1.1.3 Υποδοχή Intel® LGA1156

Η CPU LGA1155 δεν είναι συμβατή με την υποδοχή LGA1156. ΜΗΝ εγκαθιστάτε CPU LGA1155 στην υποδοχή LGA1156.

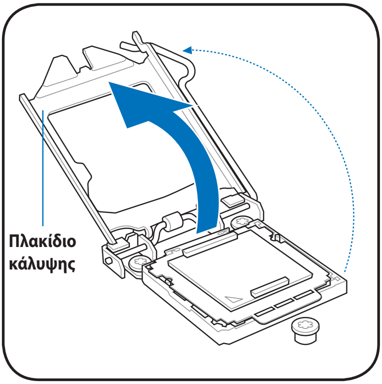
1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.

2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα δεξιά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.

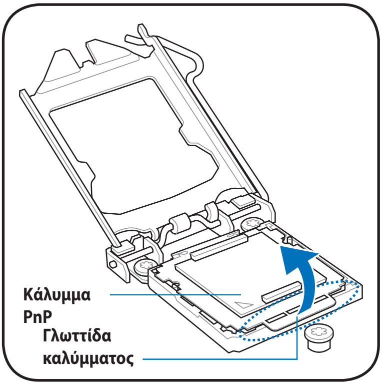

Μοχλός φόρτωσης
A
B
Γλωττίδα συγκράτησης

Για να αποφύγετε βλάβη στις ακίδες των υποδοχών μην αφαιρείτε το κάλυμμα PnP εκτός αν πρόκειται να εγκαταστήσετε μια CPU.

3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους μέχρι να ανασηκωθεί πλήρως το πλακίδιο κάλυψης.

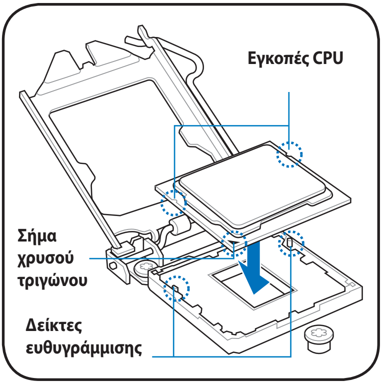

Πλακίδιο κάλυψης

4. Αφαιρέστε το κάλυμμα PnP από την υποδοχή CPU ανασηκώνοντας μόνο τη γλωττίδα.

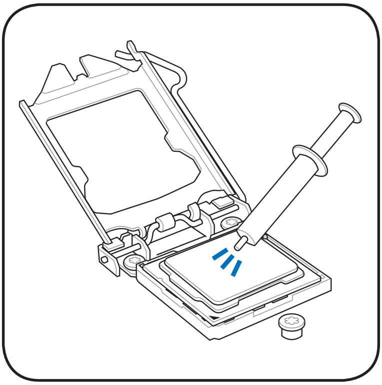

Κάλυμμα PnP
Γλωττίδα καλύμματος

5. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και τοποθετήστε τους δείκτες ευθυγράμμισης στις εγκοπές της CPU.

Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!



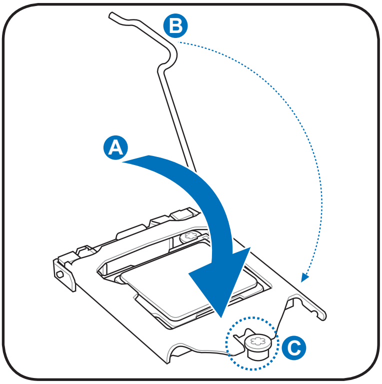
6. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



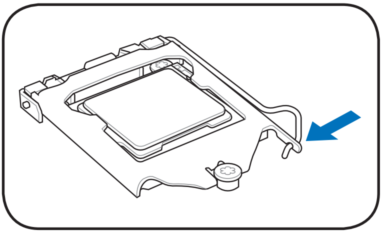
Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

7. Κλείστε το πλακίδιο τοποθέτησης (A), και πιέστε το μοχλό φόρτωσης (B) προς τα κάτω, έτσι ώστε η μπροστινή ακμή του πλακιδίου κάλυψης να συρθεί κάτω από την ασφάλεια συγκράτησης (C).



8. Εισάγετε το μοχλό φόρτωσης κάτω από τη γλωττίδα συγκράτησης.

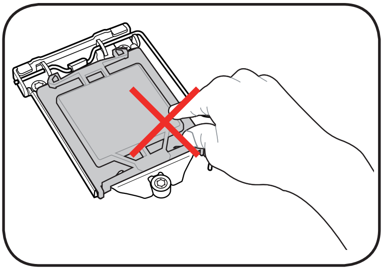


1.1.4 Υποδοχή Intel® LGA1155 (Κάλυμμα PnP στο πλακίδιο φόρτωσης)

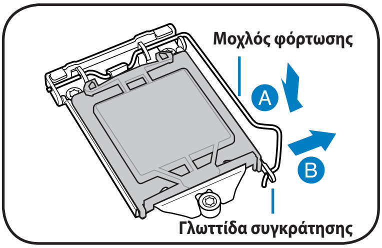
Η CPU LGA1156 δεν είναι συμβατή με την υποδοχή LGA1155. ΜΗΝ εγκαθιστάτε CPU LGA1156 στην υποδοχή LGA1155.

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.

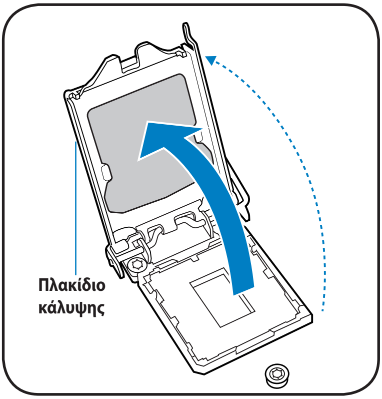
2. Βεβαιωθείτε ότι δεν έχετε αφαιρέσει το κάλυμμα PnP από την υποδοχή CPU πριν εγκαταστήσετε την CPU.



2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα δεξιά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.

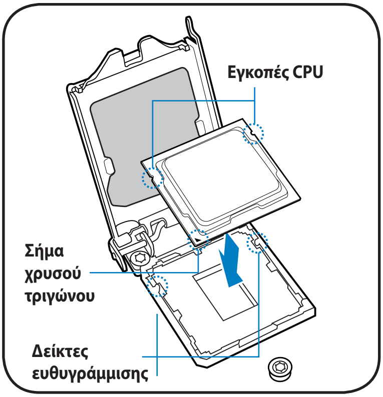


3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους μέχρι να ανασηκωθεί πλήρως το πλακίδιο κάλυψης.



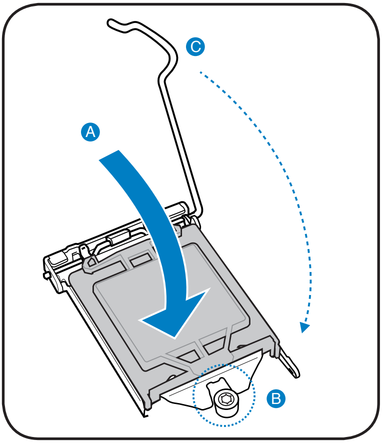
Ελληνικά

5. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και τοποθετήστε τους δείκτες ευθυγράμμισης στις εγκοπές της CPU.

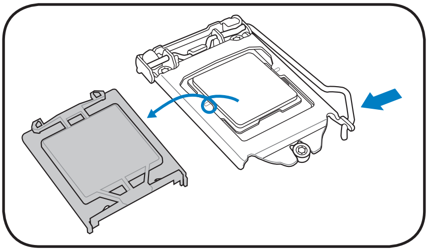


Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!

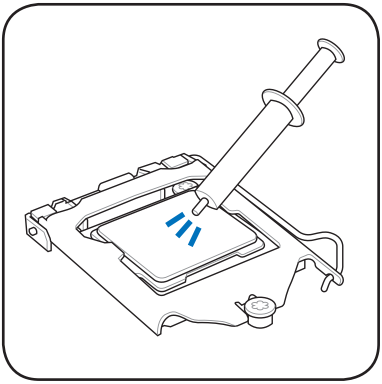
6. Κλείστε το πλακίδιο φόρτωσης (A) και βεβαιωθείτε ότι η μπροστινή άκρη του πλακιδίου γλιστράει κάτω από την ασφάλεια συγκράτησης (B). Στη συνέχεια πιέστε προς τα κάτω το μοχλό φόρτωσης (C).



7. Εισάγετε το μοχλό φόρτωσης κάτω από τη γλωττίδα συγκράτησης για να αφαιρέσετε το κάλυμμα PnP από την υποδοχή CPU.



8. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

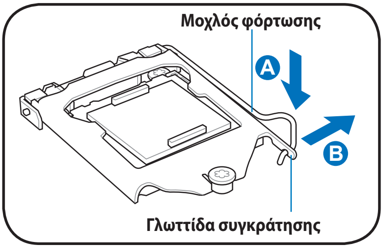
Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

1.1.5 Υποδοχή Intel® LGA1155 (Κάλυμμα PnP κάτω από το πλακίδιο φόρτωσης)

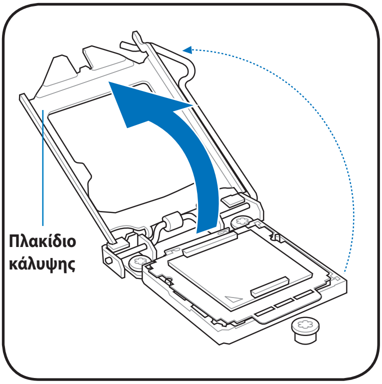
Η CPU LGA1156 δεν είναι συμβατή με την υποδοχή LGA1155. ΜΗΝ εγκαθιστάτε CPU LGA1156 στην υποδοχή LGA1155.

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.
2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα δεξιά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.

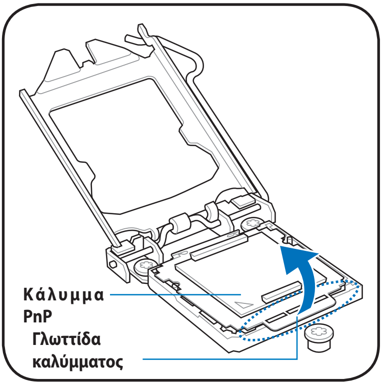
Για να αποφύγετε βλάβη στις ακίδες των υποδοχών μην αφαιρείτε το κάλυμμα PnP εκτός αν πρόκειται να εγκαταστήσετε μια CPU.


Μοχλός φόρτωσης
A
B
Γλωττίδα συγκράτησης

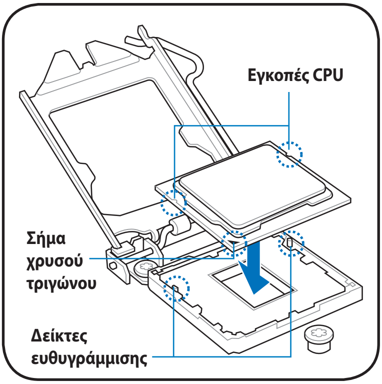
3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους μέχρι να ανασηκωθεί πλήρως το πλακίδιο κάλυψης.


Πλακίδιο κάλυψης

4. Αφαιρέστε το κάλυμμα PnP από την υποδοχή CPU ανασηκώνοντας μόνο τη γλωττίδα.

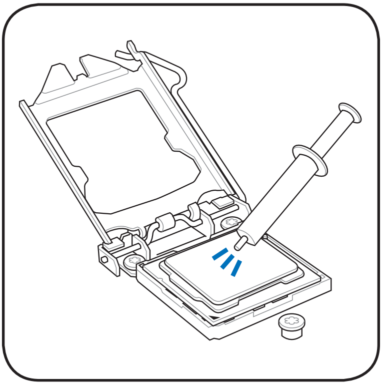

Κάλυμμα PnP
Γλωττίδα καλύμματος

5. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και τοποθετήστε τους δείκτες ευθυγράμμισης στις εγκοπές της CPU.



Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!

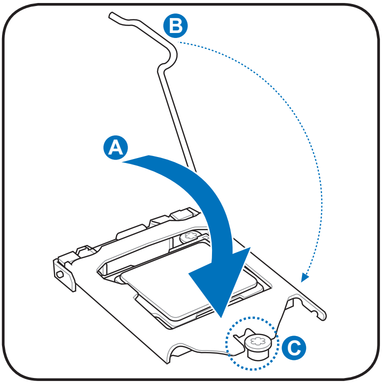
6. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



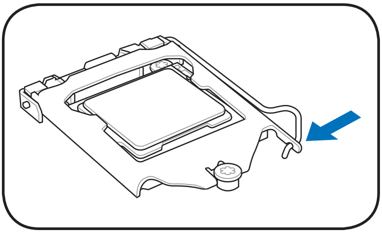
Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

7. Κλείστε το πλακίδιο τοποθέτησης (A), και πιέστε το μοχλό φόρτωσης (B) προς τα κάτω, έτσι ώστε η μπροστινή ακμή του πλακιδίου κάλυψης να συρθεί κάτω από την ασφάλεια συγκράτησης (C).

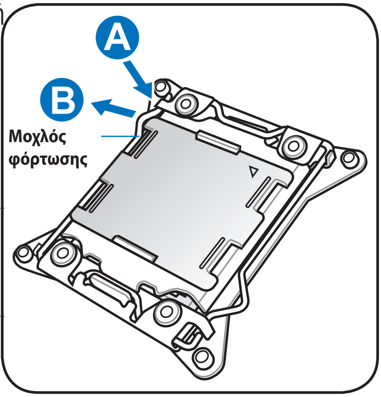


8. Εισάγετε το μοχλό φόρτωσης κάτω από τη γλωττίδα συγκράτησης.



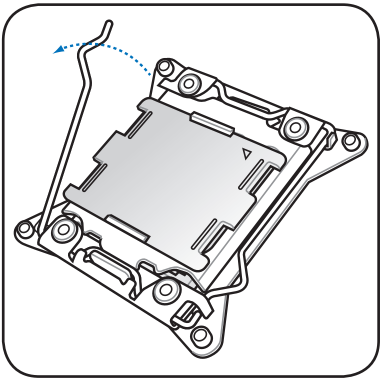
1.1.6 Υποδοχή Intel® LGA2011

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.
2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα αριστερά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.

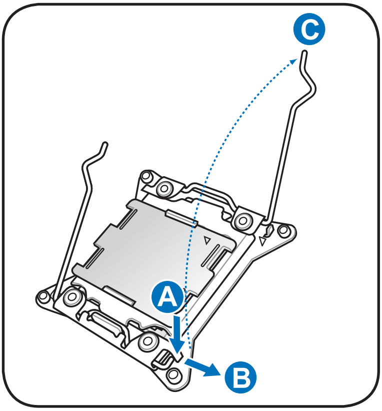


Για να αποφύγετε βλάβη στις ακίδες των υποδοχών μην αφαιρείτε το κάλυμμα PnP εκτός αν πρόκειται να εγκαταστήσετε μια CPU.

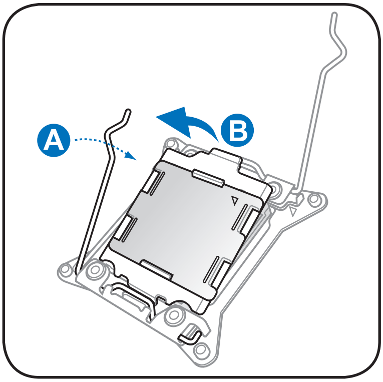
3. Ανασηκώστε ελαφρά το άγκιστρο φόρτωσης στην κατεύθυνση του βέλους.



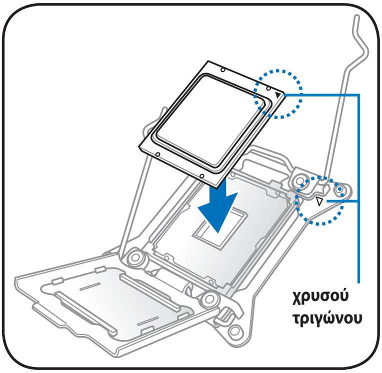
4. Κλείστε το πλακίδιο τοποθέτησης (A), και πιέστε το μοχλό φόρτωσης (B) προς τα κάτω, έτσι ώστε η μπροστινή ακμή του πλακιδίου κάλυψης να συρθεί κάτω από την ασφάλεια συγκράτησης (C). Ανασηκώστε ελαφρά το άγκιστρο φόρτωσης στην κατεύθυνση του βέλους. (C).



5. Πιέστε το αριστερό άγκιστρο φόρτωσης (A) για να ανασηκώσετε το πλακίδιο φόρτωσης (B).

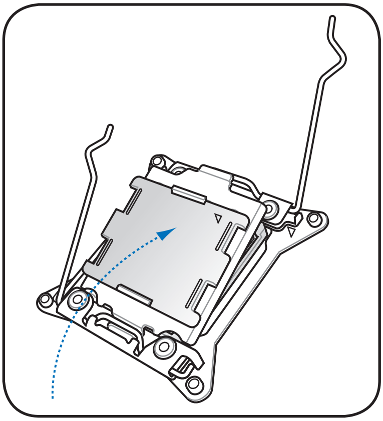


6. Τοποθετήστε τη CPU πάνω από την υποδοχή και βεβαιωθείτε ότι το τριγωνικό σήμα βρίσκεται στην πάνω δεξιά γωνία της υποδοχής.

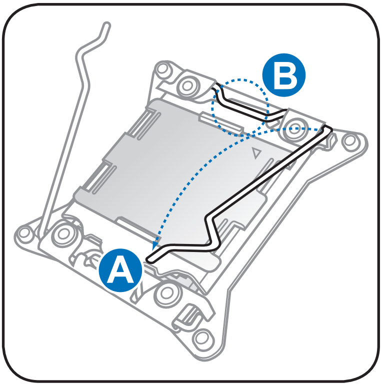


Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!

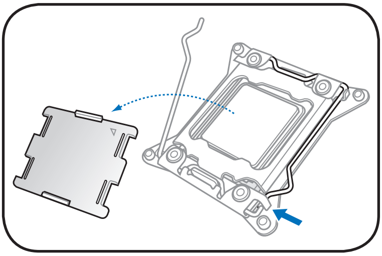
7. Κλείστε το πλακίδιο κάλυψης.



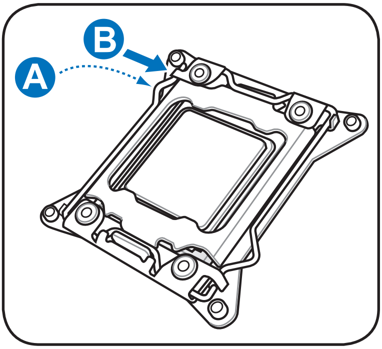
8. Πιέστε προς τα κάτω το δεξί μοχλό φόρτωσης (A) και βεβαιωθείτε ότι το πλακίδιο κάλυψης είναι στερεωμένο με το μοχλό (B).



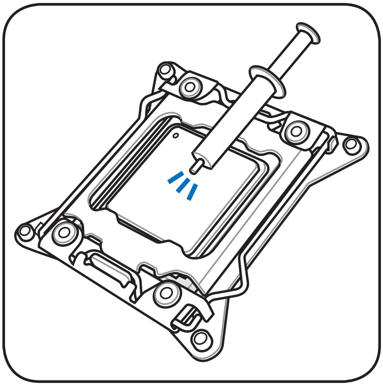
9. Τοποθετήστε το δεξί μοχλό φόρτωσης κάτω από τη γλωττίδα συγκράτησης. Αφαιρέστε το κάλυμμα PnP από την υποδοχή CPU.



10. Πιέστε προς τα κάτω τον αριστερό μοχλό φόρτωσης (A) και τοποθετήστε το μοχλό κάτω από τη γλωττίδα συγκράτησης (B).



11. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.

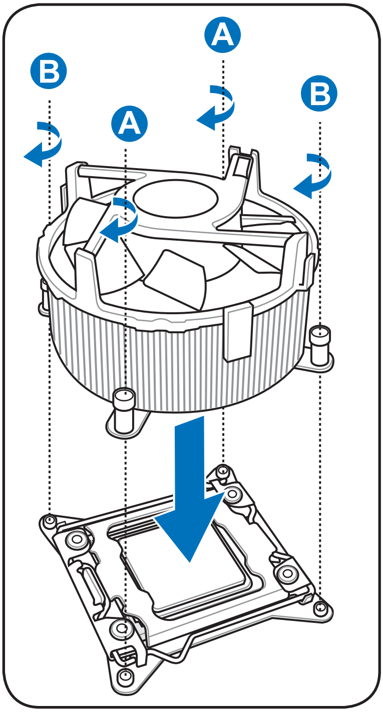


Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

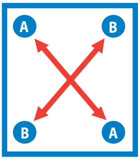
Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

12. Τοποθετήστε την ψήκτρα πάνω από την εγκατεστημένη CPU, διασφαλίζοντας ότι τα τέσσερα δετικά ταιριάζουν με τις οπές της υποδοχής CPU.

13. Στρέψτε την καθεμία από τις τέσσερις βίδες με ένα κατσαβίδι Philips (σταυρός) όσο χρειάζεται για να εγκαταστήσετε την ψήκτρα στην υποδοχή CPU. Όταν οι τέσσερις βίδες είναι τοποθετημένες στη θέση τους, σφίξτε τις μία προς μία για να ασφαλίσετε πλήρως την ψήκτρα.



Σφίξτε τις τέσσερις βίδες της ψήκτρας σε διαγώνια ακολουθία.

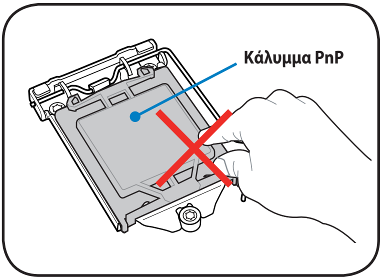


1.1.7 Υποδοχή Intel® LGA1150 (Κάλυμμα PnP στο πλακίδιο φόρτωσης)

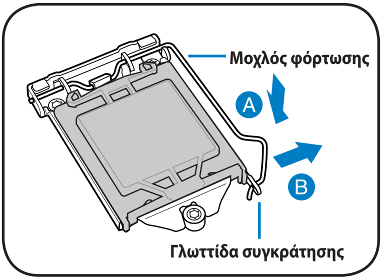
Βεβαιωθείτε ότι εγκαθιστάτε τη σωστή CPU που έχει σχεδιαστεί μόνο για την υποδοχή LGA1150. ΜΗΝ εγκαταστήσετε CPU σχεδιασμένη για τις υποδοχές LGA1155 και LGA1156 στην υποδοχή LGA1150.

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.

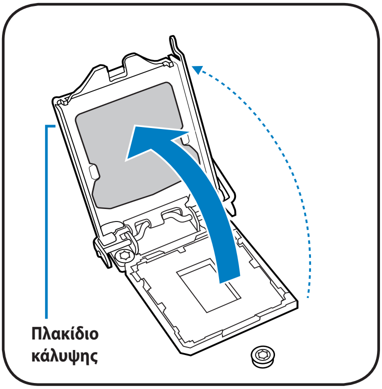
ΜΗΝ αφαιρέσετε ακόμη το κάλυμμα PnP από την υποδοχή CPU. Αν το κάνετε ενδέχεται να λυγίσουν οι ακίδες της υποδοχής. Ανατρέξτε στην παρακάτω εικόνα για τη θέση του καλύμματος PnP.



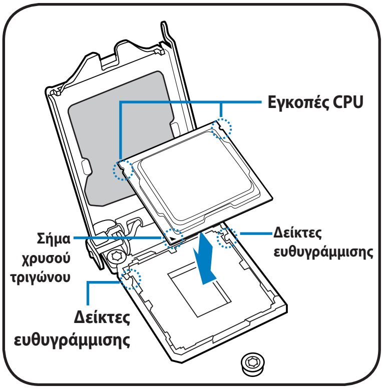
2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα δεξιά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.



3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους μέχρι να ανασηκωθεί πλήρως το πλακίδιο κάλυψης.

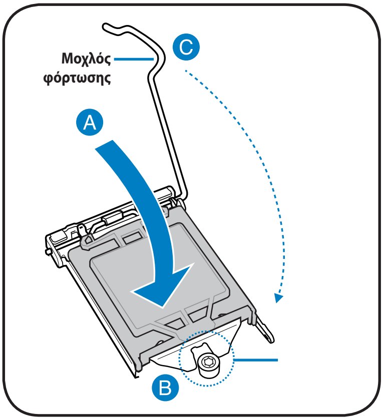


4. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και στη συνέχεια στερεώστε της εγκοπές της CPU στα πλήκτρα ευθυγράμμισης της υποδοχής.

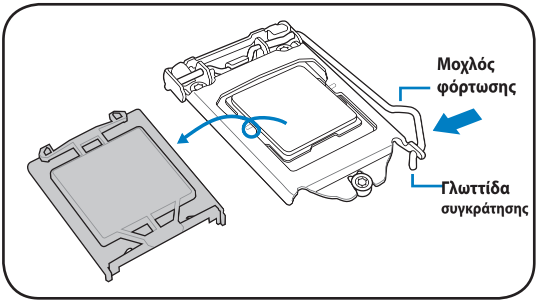

Εγκοπές CPU
Σήμα χρυσού τριγώνου
Δείκτες ευθυγράμμισης
Δείκτες ευθυγράμμισης

⚠ Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!

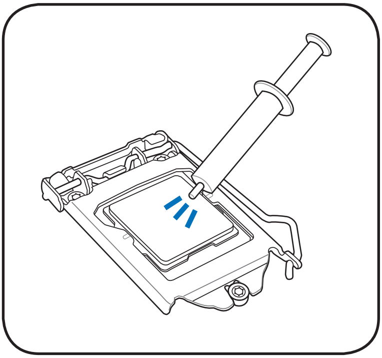
5. Κλείστε το πλακίδιο φόρτωσης (A) και βεβαιωθείτε ότι η μπροστινή άκρη του πλακιδίου γλιστράει κάτω από την ασφάλεια συγκράτησης (B). Στη συνέχεια πιέστε προς τα κάτω το μοχλό φόρτωσης (C).


Μοχλός φόρτωσης
C
A
B

6. Εισάγετε το μοχλό φόρτωσης κάτω από τη γλωττίδα συγκράτησης για να αφαιρέσετε το κάλυμμα PnP από την υποδοχή CPU.


Μοχλός φόρτωσης
Γλωττίδα συγκράτησης

7. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



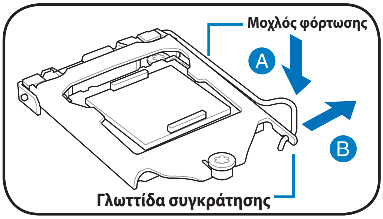
Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

1.1.8 Υποδοχή Intel® LGA1150 (Κάλυμμα PnP κάτω από το πλακίδιο φόρτωσης)

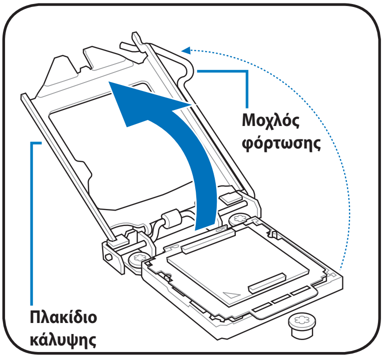
Βεβαιωθείτε ότι εγκαθιστάτε τη σωστή CPU που έχει σχεδιαστεί μόνο για την υποδοχή LGA1150. ΜΗΝ εγκαταστήσετε CPU σχεδιασμένη για τις υποδοχές LGA1155 και LGA1156 στην υποδοχή LGA1150.

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.
2. Πιέστε το μοχλό φόρτωσης με το άκρο του δακτύλου σας (A), και μετακινήστε τον προς τα δεξιά (B) μέχρι να απελευθερωθεί από τη γλωττίδα συγκράτησης.

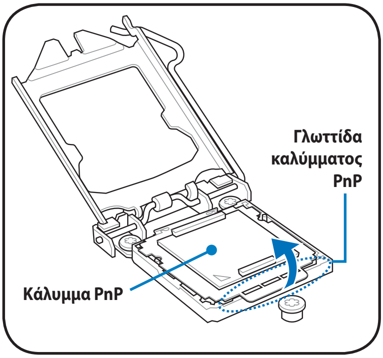

Μοχλός φόρτωσης
A
B
Γλωττίδα συγκράτησης

ΜΗΝ αφαιρέσετε ακόμη το κάλυμμα PnP από την υποδοχή CPU. Αν το κάνετε ενδέχεται να λυγίσουν οι ακίδες της υποδοχής.

3. Ανυψώστε το μοχλό φόρτωσης στην κατεύθυνση του βέλους μέχρι να ανασηκωθεί πλήρως το πλακίδιο κάλυψης.


Μοχλός φόρτωσης
Πλακίδιο κάλυψης

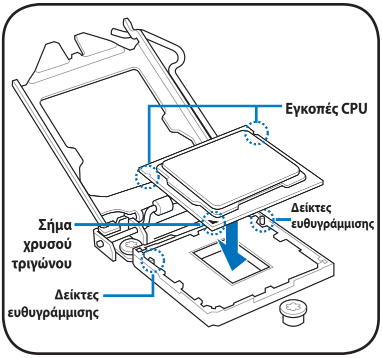
4. Αφαιρέστε το κάλυμμα PnP από την υποδοχή CPU ανασηκώνοντας μόνο τη γλωττίδα.


Γλωττίδα καλύμματος PnP
Κάλυμμα PnP

Ελληνικά

5. Τοποθετήστε τη CPU στην υποδοχή, διασφαλίζοντας ότι το χρυσό τρίγωνο βρίσκεται στην κάτω-αριστερή γωνία της υποδοχής και στη συνέχεια στερεώστε της εγκοπές της CPU στα πλήκτρα ευθυγράμμισης της υποδοχής.

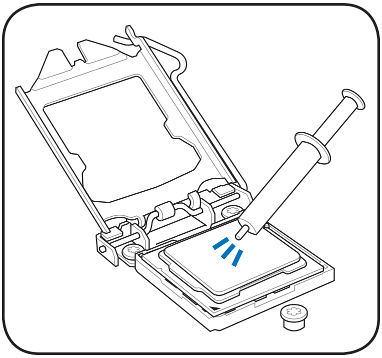
Η CPU ταιριάζει μόνο προς μια κατεύθυνση η οποία είναι και η σωστή. ΜΗΝ ασκείτε υπερβολική πίεση στη CPU για εισαγωγή στην υποδοχή ώστε να μην λυγίσουν οι ακροδέκτες της υποδοχής και να μην πάθει βλάβη η CPU!


Εγκοπές CPU
Δείκτες ευθυγράμμισης
Σήμα χρυσού τριγώνου
Δείκτες ευθυγράμμισης

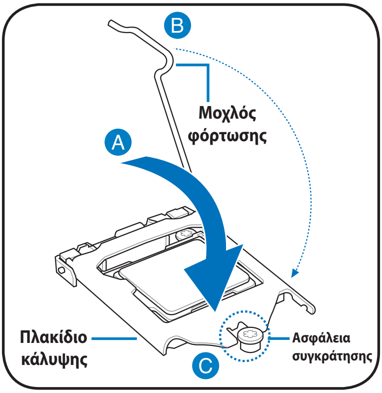
6. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.

Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

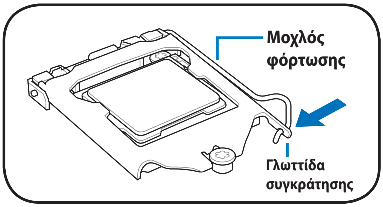
Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.



7. Κλείστε το πλακίδιο τοποθέτησης (A), και πιέστε το μοχλό φόρτωσης (B) προς τα κάτω, έτσι ώστε η μπροστινή ακμή του πλακιδίου κάλυψης να συρθεί κάτω από την ασφάλεια συγκράτησης (C).


B
Μοχλός φόρτωσης
A
Πλακίδιο κάλυψης
C
Ασφάλεια συγκράτησης

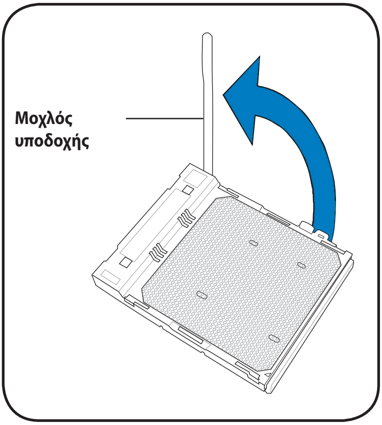
8. Εισάγετε το μοχλό φόρτωσης κάτω από τη γλωττίδα συγκράτησης.


Μοχλός φόρτωσης
Γλωττίδα συγκράτησης

1.1.9 Υποδοχή AMD AM2 / AM2+ / AM3

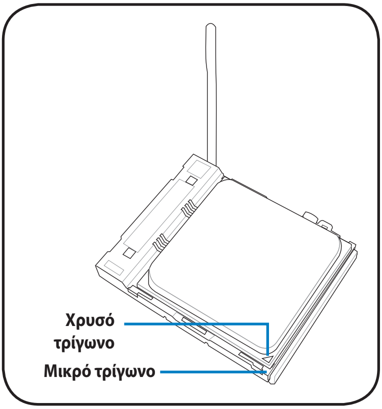
- Οι υποδοχές AMD AM2 και AM2+ είναι συμβατές με τους επεξεργαστές AMD AM2, AM2+ και AM3.
- Η υποδοχή AMD AM3 είναι συμβατή με τους επεξεργαστές AMD AM3. MHN εγκαθιστάτε επεξεργαστή AMD AM2+ / AM2 στην υποδοχή AM3. Μόνο κάποια συγκεκριμένα μοντέλα με μητρική κάρτα AM3 υποστηρίζουν επεξεργαστές AM3+ με αναβάθμιση του BIOS. Ανατρέξτε στον ιστότοπο υποστήριξης της ASUS για λεπτομέρειες.

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.
2. Απασφαλίστε την υποδοχή πιέζοντας τις πλευρές του μοχλού, και ανασηκώστε την σε γωνία έως 90º.

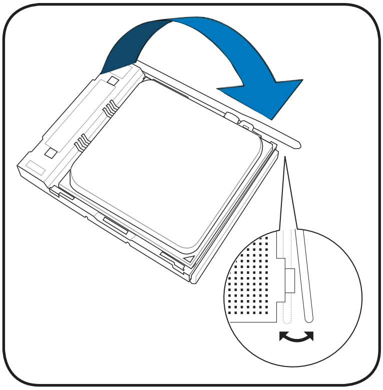


Βεβαιωθείτε ότι ο μοχλός της υποδοχής έχει ανυψωθεί σε γωνία έως 90º, αλλιώς η CPU δεν θα μπορεί να εισαχθεί πλήρως.

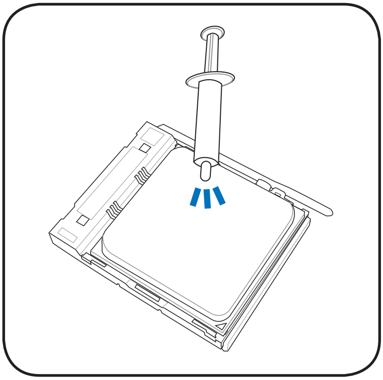
3. Τοποθετήστε τη CPU πάνω από την υποδοχή έτσι ώστε η γωνία της CPU με το χρυσό τρίγωνο να ταιριάζει με τη γωνία της υποδοχής με το μικρό τρίγωνο.
4. Εισάγετε προσεκτικά τη CPU στην υποδοχή μέχρι να τοποθετηθεί καλά στη θέση της.



5. Όταν η CPU είναι στη θέση της, πιέστε προς τα κάτω το μοχλό της υποδοχής για να ασφαλίσετε τη CPU. Ο μοχλός ασφαλίζει στην πλαϊνή γλωττίδα με έναν ήχο κλικ που υποδεικνύει ότι έχει κλειδώσει.



6. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.



Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

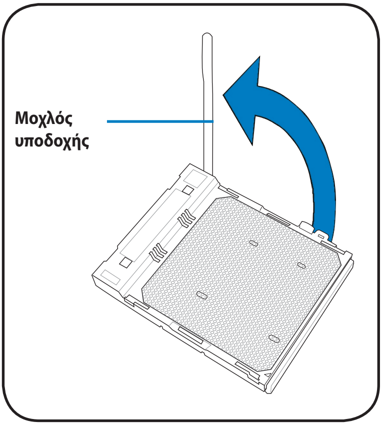
Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

1.1.10 Υποδοχή AMD AM3+

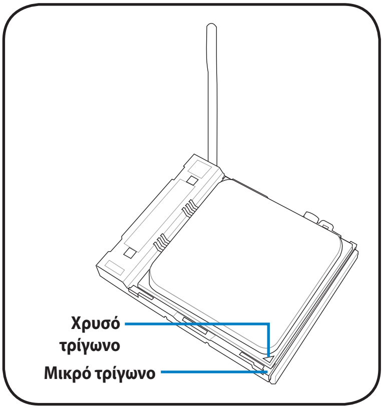
Η υποδοχή AMD AM3+ είναι συμβατή με τους επεξεργαστές AMD AM3+ και AM3. Μόνο κάποια συγκεκριμένα μοντέλα με μητρική κάρτα AM3 υποστηρίζουν επεξεργαστές AM3+ με αναβάθμιση του BIOS. Ανατρέξτε στον ιστότοπο υποστήριξης της ASUS για λεπτομέρειες.

1. Εντοπίστε την υποδοχή CPU στη μητρική κάρτα.
2. Απασφαλίστε την υποδοχή πιέζοντας τις πλευρές του μοχλού, και ανασηκώστε την σε γωνία έως 90º.

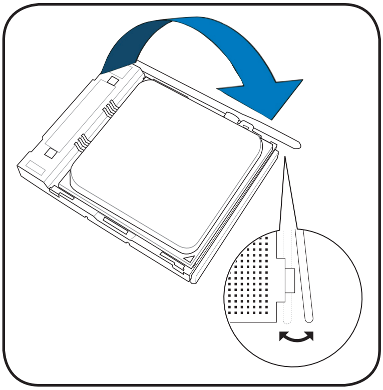
Βεβαιωθείτε ότι ο μοχλός της υποδοχής έχει ανυψωθεί σε γωνία έως 90º, αλλιώς η CPU δεν θα μπορεί να εισαχθεί πλήρως.



3. Τοποθετήστε τη CPU πάνω από την υποδοχή έτσι ώστε η γωνία της CPU με το χρυσό τρίγωνο να ταιριάζει με τη γωνία της υποδοχής με το μικρό τρίγωνο.
4. Εισάγετε προσεκτικά τη CPU στην υποδοχή μέχρι να τοποθετηθεί καλά στη θέση της.



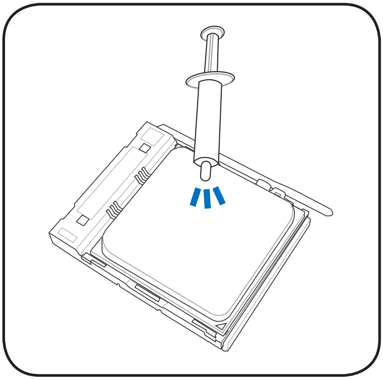
5. Όταν η CPU είναι στη θέση της, πιέστε προς τα κάτω το μοχλό της υποδοχής για να ασφαλίσετε τη CPU. Ο μοχλός ασφαλίζει στην πλαϊνή γλωττίδα με έναν ήχο κλικ που υποδεικνύει ότι έχει κλειδώσει.



6. Τοποθετήστε λίγη θερμοαγώγιμη πάστα (Thermal Interface Material) στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα, διασφαλίζοντας ότι η πάστα έχει κατανεμηθεί σε ένα ομοιόμορφο λεπτό στρώμα.

Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, παραλείψτε αυτό το βήμα.

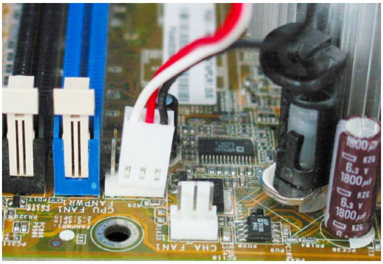
Η θερμοαγώγιμη πάστα είναι τοξική και δεν τρώγεται. ΜΗΝ την τρώτε. Αν εισαχθεί στα μάτια σας ή ακουμπήσει στο δέρμα σας, ξεπλύνετε αμέσως και αναζητήστε ιατρική βοήθεια.

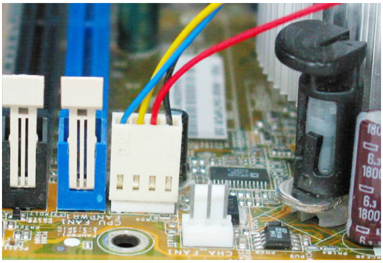


1.2 Εγκατάσταση της ψήκτρας και του ανεμιστήρα

Για να εγκαταστήσετε την ψήκτρα και τον ανεμιστήρα της CPU:

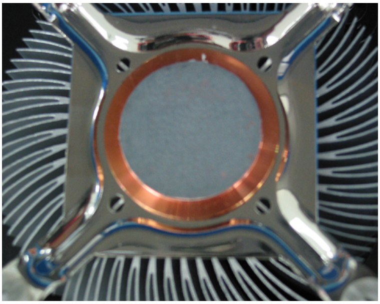
1. Επιλέξτε μια διάταξη ψήκτρας και ανεμιστήρα εγκεκριμένη από την Intel® ή από την AMD ανάλογα με τη μητρική σας κάρτα. Υπάρχουν ανεμιστήρες με ακροδέκτες με 3-ακίδες (αριστερά) και με 4-ακίδες (δεξιά). Η τεχνολογία ASUS Q-Fan υποστηρίζει μόνο ανεμιστήρες CPU με ακροδέκτες 4-ακίδων.





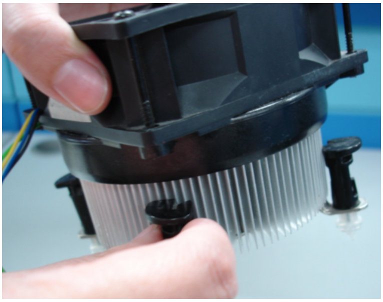
Για ψήκτρα εγκεκριμένη από την Intel®:

2. Μερικές ψήκτρες παραδίδονται με προεγκατεστημένη θερμική πάστα. Αν ισχύει αυτό, μην την ξύσετε για να την αφαιρέσετε και απομακρύνετε την προστατευτική ταινία μόνο πριν από την εγκατάσταση. Αν δεν ισχύει, πριν εγκαταστήσετε την ψήκτρα, ρίξτε αρκετές σταγόνες θερμικής πάστας στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα. Βεβαιωθείτε ότι την απλώνετε σε ένα λεπτό ομοιόμορφο στρώμα.

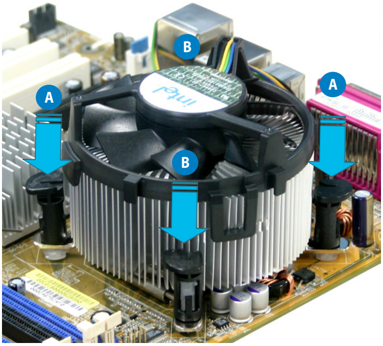


Για να αποφύγετε μόλυνση της πάστας, ΜΗΝ απλώνετε την πάστα απευθείας με το δάκτυλό σας.

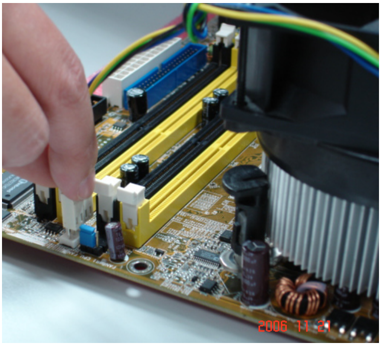
3. Προσανατολίστε κάθε σύνδεσμο με το στενό άκρο του αύλακα με κατεύθυνση προς τα πάνω.



4. Πιέστε προς τα κάτω τους δύο συνδέσμους μαζί σε διαγώνια ακολουθία για να ασφαλίσετε τη διάταξη της ψήκτρας και του ανεμιστήρα στη θέση της.



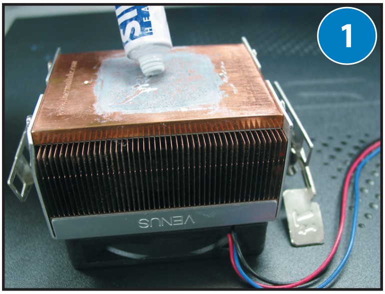
5. Συνδέστε το καλώδιο του ανεμιστήρα της CPU στον αντίστοιχο ακροδέκτη στη μητρική κάρτα.

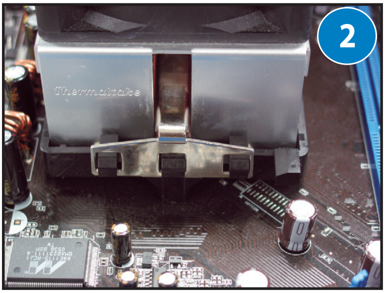


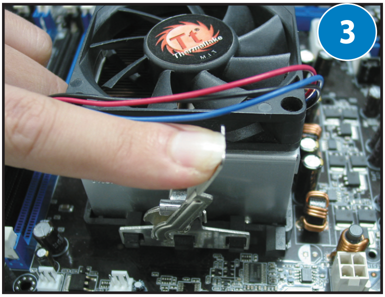
ΜΗΝ ξεχάσετε να συνδέσετε τον ακροδέκτη του ανεμιστήρα της CPU! Μπορεί να συμβούν σφάλματα παρακολούθησης του υλικού αν δεν συνδέσετε τον ακροδέκτη και συνιστάται να χρησιμοποιήσετε μια ψήκτρα πανκατευθυντική για να καλύψετε τη μέγιστη περιοχή έκλυσης θερμότητας.

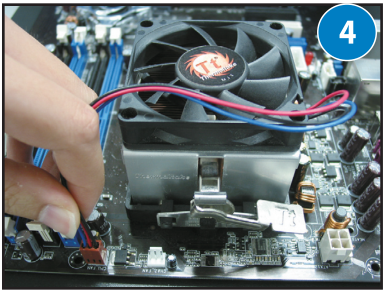
Για ψήκτρα εγκεκριμένη από την AMD:

Ακολουθήστε τις παρακάτω οδηγίες για να εγκαταστήσετε ψήκτρα εγκεκριμένη από την AMD.







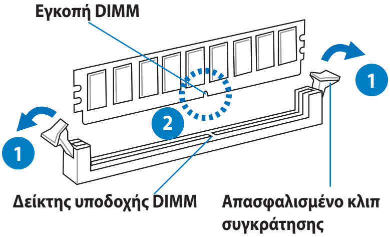


1.3 Εγκατάσταση DIMM

Βεβαιωθείτε ότι έχετε αποσυνδέσει την τροφοδοσία ρεύματος πριν προσθέσετε ή αφαιρέσετε DIMMs ή άλλα εξαρτήματα του συστήματος. Αν δεν το κάνετε ενδέχεται να προκληθεί βλάβη τόσο στη μητρική κάρτα όσο και στα εξαρτήματα.

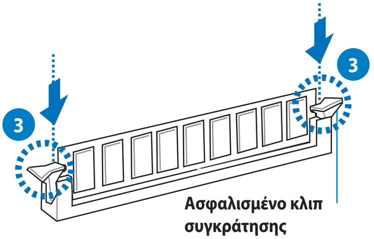
Εγκατάσταση DIMM σε υποδοχή DIMM με διπλό κλιπ

1. Απασφαλίστε την υποδοχή της DIMM πιέζοντας τα κλιπ συγκράτησης προς τα έξω.
2. Ευθυγραμμίστε τη DIMM στην υποδοχή έτσι ώστε η εγκοπή στη DIMM να ταιριάζει με το δείκτη της υποδοχής DIMM στην υποδοχή.



Η DIMM διαθέτει μια εγκοπή ώστε να ταιριάζει μόνο σε μια κατεύθυνση. ΜΗΝ ασκείτε υπερβολική δύναμη στη DIMM για εισαγωγή σε μια υποδοχή σε λάθος κατεύθυνση για να αποφύγετε την πρόκληση βλάβης στη DIMM.

3. Κρατήστε τη DIMM και με τα δύο σας χέρια από τα άκρα, στη συνέχεια εισάγετε τη DIMM κάθετα στην υποδοχή. Ασκήστε δύναμη και στα δύο άκρα της DIMM ταυτόχρονα μέχρι τα κλιπ συγκράτησης να ασφαλίσουν στη θέση τους, και να μην μπορείτε να πιέσετε άλλο τη DIMM για να βεβαιωθείτε για τη σωστή τοποθέτηση της DIMM.

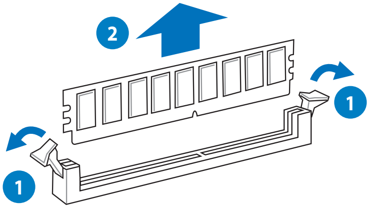


Εισάγετε πάντα τη DIMM στην υποδοχή ΚΑΘΕΤΑ για να αποφύγετε βλάβη στην εγκοπή της DIMM.

- Για να εγκαταστήσετε δύο ή περισσότερες DIMMs, ανατρέξτε στον οδηγό χρήστη που παρέχεται στη συσκευασία της μητρικής κάρτας.
- Ανατρέξτε στον οδηγό χρήστη για τη λίστα με τους πιστοποιημένους προμηθευτές των στοιχείων μνήμης.

Αφαίρεση DIMM από υποδοχή DIMM με διπλό κλιπ

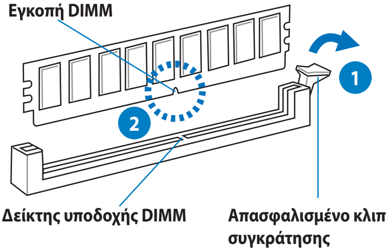
1. Πιέστε ταυτόχρονα τα κλιπ συγκράτησης προς τα έξω για να απασφαλίσετε τη DIMM.
2. Αφαιρέστε τη DIMM από την υποδοχή.



Στηρίζετε τη DIMM ελαφρά με τα δάκτυλά σας όταν πιέζετε τα κλιπ συγκράτησης. Η DIMM μπορεί να πάθει βλάβη όταν εξαχθεί με μεγάλη δύναμη.

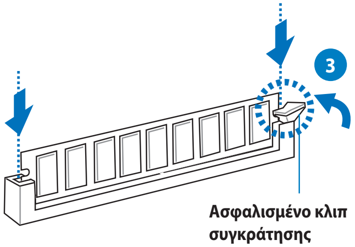
Εγκατάσταση DIMM σε υποδοχή DIMM με μονό κλιπ

1. Απασφαλίστε την υποδοχή DIMM πιέζοντας τα κλιπ συγκράτησης προς τα έξω.
2. Ευθυγραμμίστε τη DIMM στην υποδοχή έτσι ώστε η εγκοπή στη DIMM να ταιριάζει με το δείκτη της υποδοχής DIMM στην υποδοχή.



Η DIMM διαθέτει μια εγκοπή ώστε να ταιριάζει μόνο σε μια κατεύθυνση. ΜΗΝ ασκείτε υπερβολική δύναμη στη DIMM για εισαγωγή σε μια υποδοχή σε λάθος κατεύθυνση για να αποφύγετε την πρόκληση βλάβης στη DIMM.

3. Κρατήστε τη DIMM και με τα δύο σας χέρια από τα άκρα, στη συνέχεια εισάγετε τη DIMM κάθετα στην υποδοχή. Ασκήστε δύναμη και στα δύο άκρα της DIMM ταυτόχρονα μέχρι τα κλιπ συγκράτησης να ασφαλίσουν στη θέση τους, και να μην μπορείτε να πιέσετε άλλο τη DIMM για να βεβαιωθείτε για τη σωστή τοποθέτηση της DIMM.

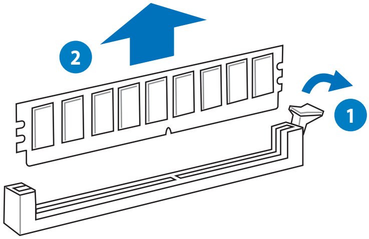


Εισάγετε πάντα τη DIMM στην υποδοχή ΚΑΘΕΤΑ για να αποφύγετε βλάβη στην εγκοπή της DIMM.

- Για να εγκαταστήσετε δύο ή περισσότερες DIMMs, ανατρέξτε στον οδηγό χρήστη που παρέχεται στη συσκευασία της μητρικής κάρτας.
- Ανατρέξτε στον οδηγό χρήστη για τη λίστα με τους πιστοποιημένους προμηθευτές των στοιχείων μνήμης.

Αφαίρεση DIMM από υποδοχή DIMM με μονό κλιπ

1. Πιέστε τα κλιπ συγκράτησης προς τα έξω για να απασφαλίσετε τη DIMM.
2. Αφαιρέστε τη DIMM από την υποδοχή.

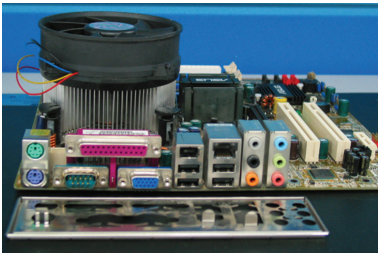


Στηρίζετε τη DIMM ελαφρά με τα δάκτυλά σας όταν πιέζετε τα κλιπ συγκράτησης. Η DIMM μπορεί να πάθει βλάβη όταν εξαχθεί με μεγάλη δύναμη.

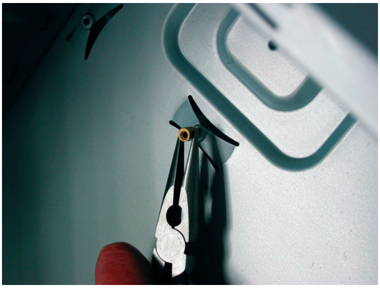
1.4 Εγκατάσταση της μητρικής κάρτας

1. Οι θύρες I/O διαφέρουν ανάλογα με τη μητρική κάρτα. Χρησιμοποιήστε και εγκαταστήστε το πίσω προστατευτικό I/O που παρέχεται μόνο στη συσκευασία της μητρικής κάρτας.

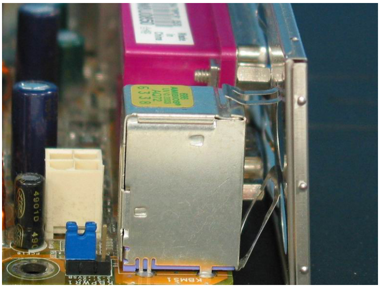
Μερικές αιχμηρές γωνίες και σημεία μπορεί να προκαλέσουν ανθρώπινο τραυματισμό. Συνιστάται να φοράτε γάντια ανθεκτικά σε εργασίες κοπής ή διάτρησης πριν εγκαταστήσετε τη μητρική κάρτα και το προστατευτικό I/O.



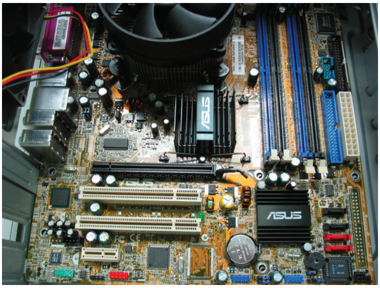
2. Εγκαταστήστε τα στηρίγματα στις αντίστοιχες οπές βίδας στο μεταλλικό πλακίδιο.



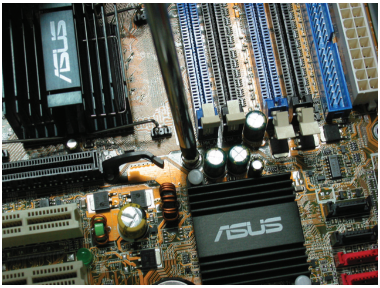
3. Τα προστατευτικά ελατήρια ακμών I/O μπορεί να προκαλέσουν βλάβη στις θύρες I/O. Προσέχετε όταν εγκαθιστάτε το προστατευτικό I/O.



4. Τοποθετήστε την πλευρά I/O της μητρικής κάρτας προς την πίσω πλευρά του περιβλήματος και τοποθετήστε τη μητρική κάρτα στο περίβλημα.



5. Εισάγετε και σφίξτε χαλαρά κάθε βίδα σε διαγώνια ακολουθία πρώτα. Αφού εισάγετε όλες τις βίδες, σφίξτε τις μέχρι να τις νιώθετε σφικτές με το χέρι.



- Μπορείτε να αφαιρέσετε τα μεταλλικά καλύμματα των υποδοχών για τις κάρτες επέκτασης που βρίσκονται στην πίσω πλευρά του περιβλήματος πριν εγκαταστήσετε τη μητρική κάρτα. Σε μερικά μοντέλα περιβλήματος, μπορεί να είναι δύσκολο να αφαιρέσετε το κάλυμμα της υποδοχής επέκτασης μετά την εγκατάσταση.
- ΜΗΝ σφίγγετε υπερβολικά τις βίδες. Σε αντίθετη περίπτωση μπορεί να προκληθεί βλάβη στη μητρική κάρτα.

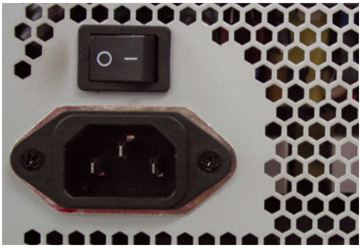
1.5 Εγκατάσταση της μονάδας τροφοδοτικού

Υπάρχουν δύο είδη συχνά χρησιμοποιούμενων μονάδων τροφοδοτικών. Το ένα με ενεργό PFC (Power Factor Correction) και το άλλο με παθητικό PFC.

1. Επιλέξτε μονάδα τροφοδοτικού.

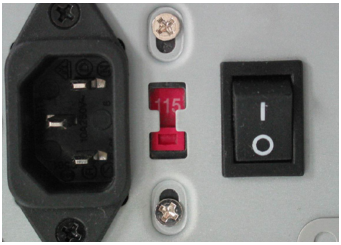
Τροφοδοτικό με ενεργητικό PFC:

Το ενεργητικό PFC διορθώνει αυτόματα την είσοδο τάσης AC.



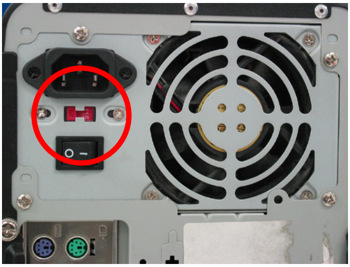
Τροφοδοτικό με παθητικό PFC:

Το παθητικό PFC απαιτεί από το χρήστη να ρυθμίσει χειροκίνητα την τάση εισόδου AC.



2. Αν χρησιμοποιείτε τροφοδοτικό με παθητικό PFC, ρυθμίστε τη σωστή είσοδο τάσης AC για την περιοχή σας.

Αν δεν ρυθμίσετε το τροφοδοτικό στη σωστή τάση εισόδου AC θα προκληθεί σοβαρή βλάβη στο σύστημα.



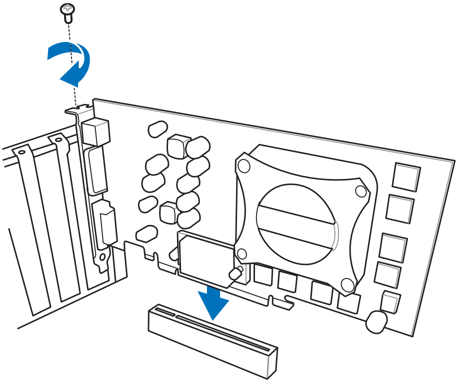
Χρησιμοποιείτε τροφοδοτικά μόνο με πιστοποιητικό ασφάλειας. Η χρήση ασταθών τροφοδοτικών μονάδων μπορεί να προκαλέσει βλάβη στη μητρική κάρτα και σε άλλα εξαρτήματα. Ανατρέξτε στον οδηγό χρήστη για τα τροφοδοτικά που πληρούν τις προδιαγραφές της μητρικής κάρτας.

1.6 Εγκατάσταση κάρτας επέκτασης

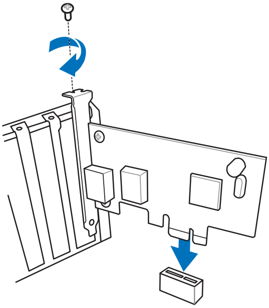
Για να εγκαταστήσετε μια κάρτα επέκτασης:

1. Αφαιρέστε το μεταλλικό κάλυμμα της υποδοχής απέναντι από την υποδοχή της κάρτας επέκτασης όπου θέλετε να εγκαταστήσετε την κάρτα επέκτασης.
2. Εγκαταστήστε την κάρτα επέκτασης και βεβαιωθείτε ότι είναι σωστά τοποθετημένη στην υποδοχή.
3. Βιδώστε για να ασφαλίσετε την κάρτα στην υποδοχή.
4. Επαναλάβετε τα προηγούμενα βήματα για να εγκαταστήσετε μια άλλη κάρτα επέκτασης.

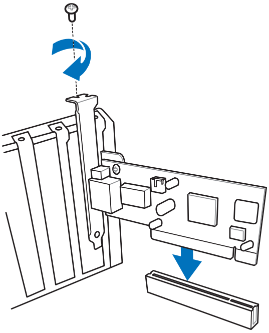
Κάρτα PCIE x16



Κάρτα PCIE x1



Κάρτα PCI

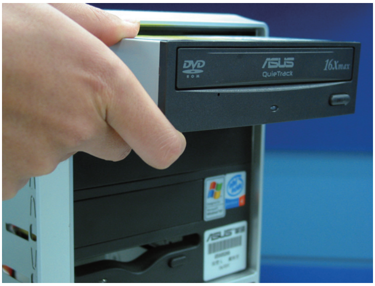


- Ανατρέξτε στην τεκμηρίωση της κάρτας για λεπτομέρειες σχετικά με τη διαμόρφωση της κάρτας, και στον οδηγό χρήστη της μητρικής κάρτας σε περίπτωση που χρειαστεί να διαμορφώσετε τους βραχυκυκλωτήρες μετά την εγκατάσταση της κάρτας επέκτασης.
- Ανατρέξτε στον οδηγό χρήστη της μητρικής κάρτας για οδηγίες σχετικά με τη σύνδεση του καλωδίου σήματος της κάρτας επέκτασης.

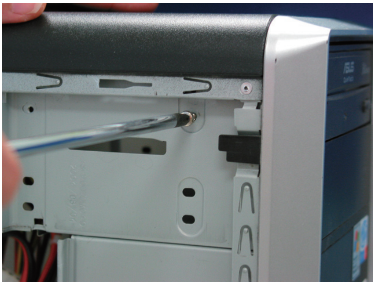
1.7 Εγκατάσταση μονάδων δίσκου

1.7.1 Οπτική μονάδα δίσκου PATA

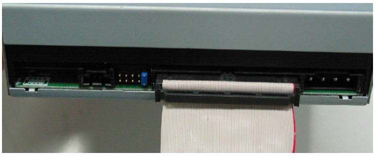
1. Αφαιρέστε το ψευδοκάλυμμα και σύρετε την οπτική μονάδα δίσκου στο φατνίο.



2. Ευθυγραμμίστε με τις οπές βίδας και ασφαλίστε τη μονάδα δίσκου με βίδες.

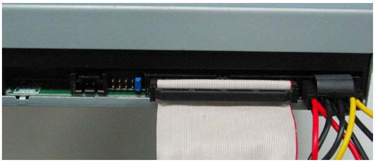


3. Προσανατολίστε και συνδέστε το καλώδιο IDE στην οπτική μονάδα δίσκου. Η κόκκινη ρίγα στο καλώδιο IDE είναι το άκρο ακίδας1 και πρέπει να ταιριάζει με τη βαθουλωτή ακίδα1 στην οπτική μονάδα δίσκου.

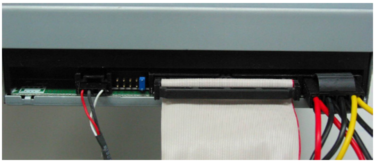


Τα καλώδια IDE έχουν ψευδοπροστασία. Μην υπερβάλλετε ποτέ κατά την εισαγωγή του καλωδίου IDE στον ακροδέκτη.

4. Συνδέστε το καλώδιο τροφοδοσίας 4-ακίδων στην οπτική μονάδα δίσκου.



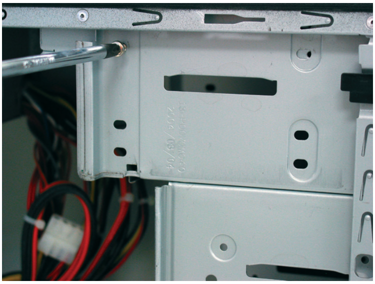
5. Συνδέστε το καλώδιο ήχου στον ακροδέκτη στην οπτική μονάδα δίσκου.



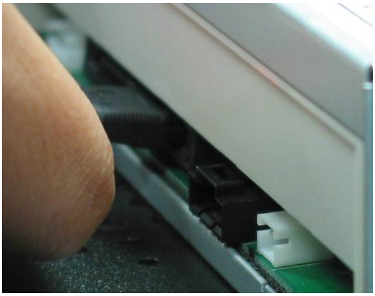
1.7.2 Οπτική μονάδα δίσκου SATA

1. Αφαιρέστε το ψευδοκάλυμμα και σύρετε την οπτική μονάδα δίσκου στο φατνίο.

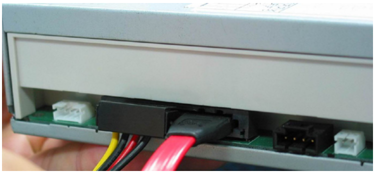
2. Ευθυγραμμίστε με τις οπές βίδας και ασφαλίστε τη μονάδα δίσκου με βίδες.



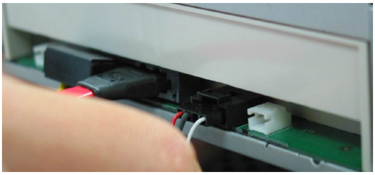
3. Προσανατολίστε και συνδέστε το καλώδιο SATA στην οπτική μονάδα δίσκου. Τα καλώδια SATA έχουν ψευδοπροστασία. Μην υπερβάλλετε ποτέ κατά την εισαγωγή του καλωδίου SATA στον ακροδέκτη.



4. Συνδέστε το καλώδιο τροφοδοσίας SATA στην οπτική μονάδα δίσκου.

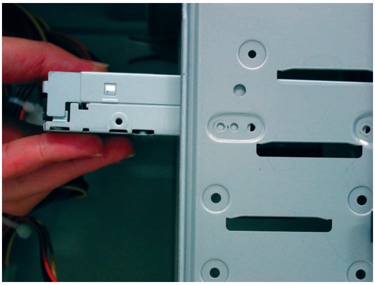


5. Συνδέστε το καλώδιο ήχου στον ακροδέκτη στην οπτική μονάδα δίσκου.

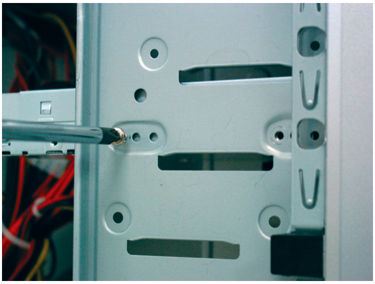


1.7.3 Μονάδα δισκέττας

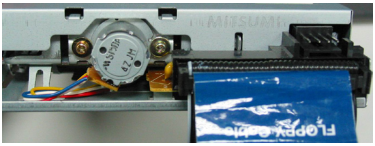
1. Αφαιρέστε το ψευδοκάλυμμα και σύρετε την μονάδα δισκέττας στο φατνίο.



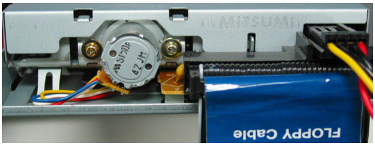
2. Ευθυγραμμίστε με τις οπές βίδας και ασφαλίστε τη μονάδα δίσκου με βίδες.



3. Προσανατολίστε και συνδέστε το καλώδιο διασύνδεσης της μονάδας δισκέττας στη μονάδα δισκέττας. Η κόκκινη ρίγα στο καλώδιο είναι το άκρο ακίδας1 και πρέπει να ταιριάζει με την ακίδα1 στη μονάδα δισκέττας.

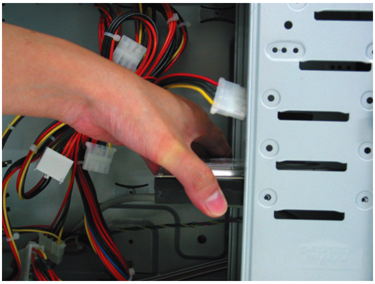


4. Συνδέστε το καλώδιο τροφοδοσίας της μονάδας δισκέττας στην πίσω πλευρά της μονάδας δισκέττας.

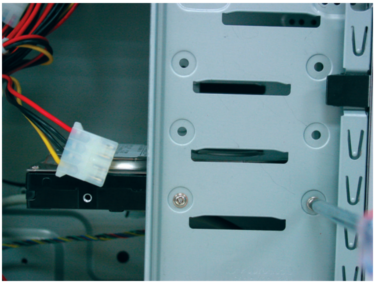


1.7.4 Μονάδα σκληρού δίσκου PATA

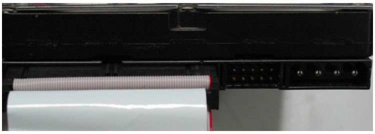
1. Εισάγετε τη μονάδα σκληρού δίσκου PATA στο φατνίο.



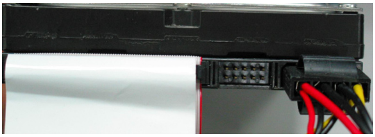
2. Ευθυγραμμίστε με τις οπές βίδας και ασφαλίστε τη μονάδα δίσκου με βίδες.



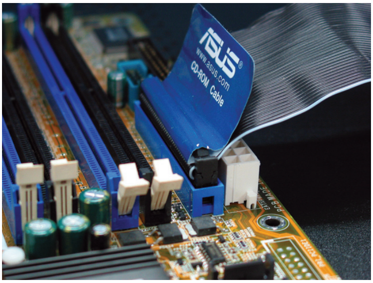
3. Προσανατολίστε και συνδέστε το καλώδιο σήματος στη μονάδα σκληρού δίσκου. Η κόκκινη λωρίδα στο καλώδιο είναι το άκρο της ακίδας1. Ταιριάξτε με την εγκοπή ψευδοπροστασίας και μην υπερβάλλετε κατά την εισαγωγή του καλωδίου στον ακροδέκτη.



4. Συνδέστε το καλώδιο τροφοδοσίας 4 ακίδων στον ακροδέκτη στην πίσω πλευρά της μονάδας σκληρού δίσκου.

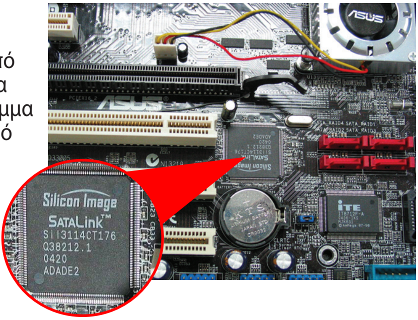


5. Συνδέστε το άλλο άκρο του καλωδίου σήματος στην αντίστοιχη υποδοχή της μητρικής κάρτας.



Σημειώσεις για την εγκατάσταση μονάδας σκληρού δίσκου PATA

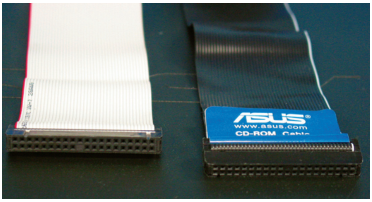
- Αν το λειτουργικό σας σύστημα είναι εγκατεστημένο σε μονάδα σκληρού δίσκου που ελέγχεται από RAID ή άλλους ελεγκτές, πρέπει να εγκαταστήσετε πρώτα το πρόγραμμα οδήγησης του ελεγκτή στο σκληρό δίσκο.



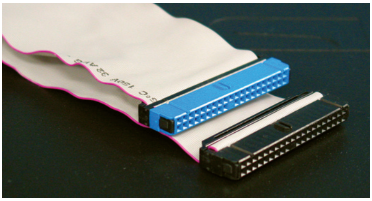
- Τα καλώδια έχουν σχεδιαστεί με γλωττίδες έλξης. Εγκαταστήστε απλά τις μονάδες δίσκου με βάση τις ετικέτες των καλωδίων. Για να αποφύγετε την πρόκληση βλάβης στις ακίδες, τραβήξτε τις γλωττίδες του καλωδίου για να αποσυνδέσετε το καλώδιο.

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

- Υπάρχουν δύο καλώδια για μονάδες δίσκου ATA IDE, το νεότερο με 80 σύρματα (δεξιά) και το παλαιότερο με 40 σύρματα (αριστερά). Για μονάδες δίσκου ATA66/100/133, μόνο το καλώδιο με τα 80 σύρματα μπορεί να παρέχει καλύτερη απόδοση. Τα καλώδια με τα 40 σύρματα χρησιμοποιούνται συνήθως για τις οπτικές μονάδες.



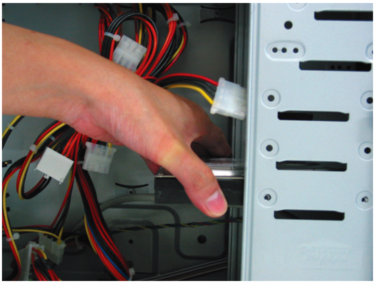
- Ο ακροδέκτης του καλωδίου διαθέτει κωδικοποίηση με χρώματα. Το μπλε είναι για τον ακροδέκτη φιλοξενίας και το μαύρο/γκρι είναι για την πρωτεύουσα/δευτερεύουσα μονάδα δίσκου.



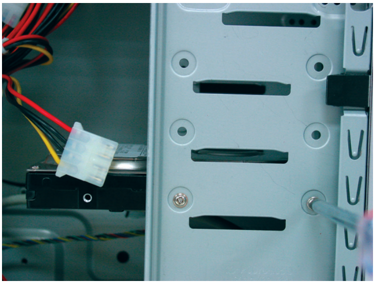
- Όταν συνδέετε δύο συσκευές IDE, πρέπει να ρυθμίσετε τους βραχυκυκλωτήρες (jumpers) σε διαφορετική θέση, έναν στην κύρια και έναν στη δευτερεύουσα. Αν χρησιμοποιείτε καλώδιο 80 συρμάτων, μπορείτε να χρησιμοποιήσετε τον επιλεγμένο τρόπο του καλωδίου.

1.7.5 Μονάδα σκληρού δίσκου SATA

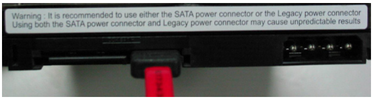
1. Εισάγετε τη μονάδα σκληρού δίσκου SATA στο φατνίο.



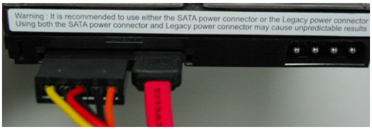
2. Ευθυγραμμίστε με τις οπές βίδας και ασφαλίστε τη μονάδα δίσκου με βίδες.



3. Προσανατολίστε και συνδέστε το καλώδιο SATA στη μονάδα σκληρού δίσκου. Το καλώδιο συνδέεται μόνο σε μια κατεύθυνση.

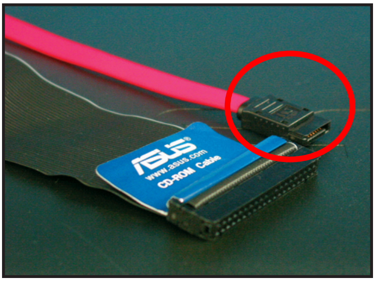

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

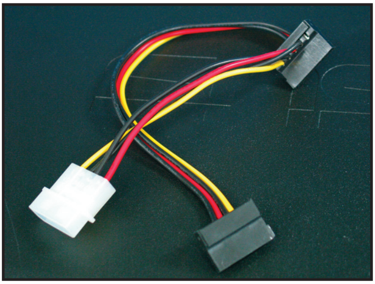
4. Συνδέστε το καλώδιο τροφοδοσίας SATA στην πίσω πλευρά της μονάδας σκληρού δίσκου.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

Σημειώσεις για την εγκατάσταση μονάδας σκληρού δίσκου SATA

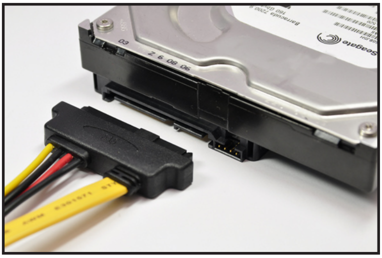
- Η σειριακή διεπαφή ATA (SATA) παρέχει υψηλότερη ταχύτητα μετάδοσης δεδομένων και καλύτερη ανοχή τάσης. Ο στενός σχεδιασμός του καλωδίου SATA επιλύει επίσης προβλήματα καλωδίωσης και επιτρέπει καλύτερη ροή αέρα στο περίβλημα.
- Ο ακροδέκτης του καλωδίου τροφοδοσίας SATA είναι διαφορετικός από τον παραδοσιακό ακροδέκτη τροφοδοσίας 4 ακίδων. Η μητρική κάρτα ASUS παρέχει καλώδια προσαρμογής σε περίπτωση που το τροφοδοτικό σας δεν περιλαμβάνει αυτόν το νέο ακροδέκτη.


ASUS
www.asus.com
CD-ROM Cable

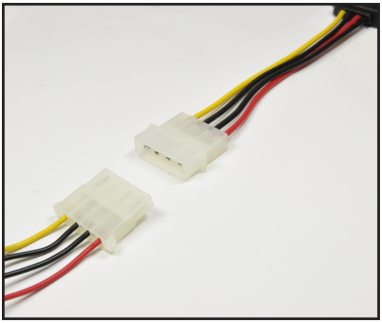


1.7.6 Μονάδα σκληρού δίσκου SAS

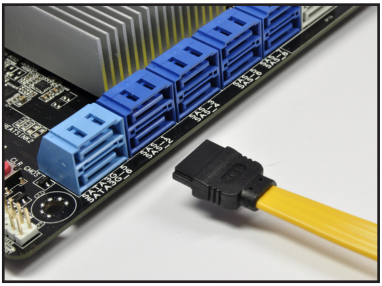
1. Προσανατολίστε και συνδέστε το καλώδιο συνδυασμού σήματος SAS / ισχύος στη μονάδα σκληρού δίσκου. Το καλώδιο συνδέεται μόνο σε μια κατεύθυνση.



2. Συνδέστε το καλώδιο τροφοδοσίας SAS στην υποδοχή τροφοδοσίας στο τροφοδοτικό.



3. Συνδέστε το καλώδιο σήματος SAS στον ακροδέκτη SAS στη μητρική κάρτα.

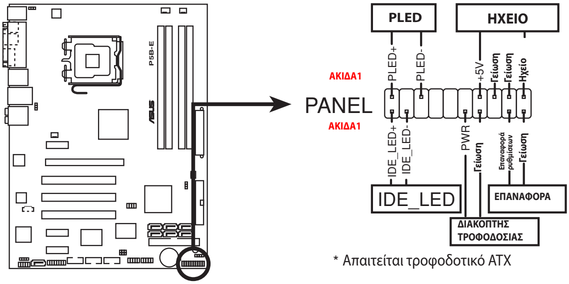


1.8 Καλώδια μπροστινής πλευράς

Για να συνδέσετε τα καλώδια στη μπροστινή πλευρά:

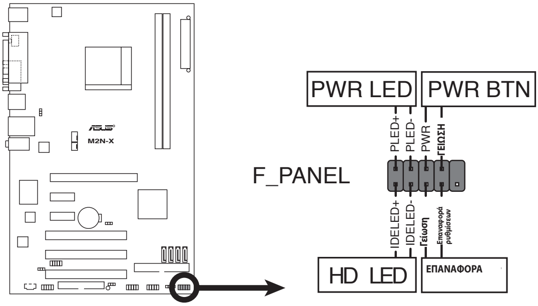
- RESET (Reset Switch) [Διακόπτης Επαναφοράς]
- PLED (Power LED) [Λυχνία LED τροφοδοσίας]
- PWRSW (Power Switch) [Διακόπτης τροφοδοσίας]
- IDE_LED (IDE Hard Disk Active LED) [Λυχνία LED ενεργού σκληρού δίσκου]
- SPEAKER (Speaker Connector) [Ακροδέκτης ηχείου]

Ακροδέκτης πρόσοψης 20-8 ακίδων


P5B-E
PLED
ΗΧΕΙΟ
ΑΚΙΔΑ1
PLED+
PLED-
+5V
Γείωση
Γείωση
Ηχείο
PANEL
ΑΚΙΔΑ1
IDE_LED+
IDE_LED-
PWR
Γείωση
Επαναφορά ρυθμίσεων
Γείωση
IDE_LED
ΕΠΑΝΑΦΟΡΑ
ΔΙΑΚΟΠΤΗΣ ΤΡΟΦΟΔΟΣΙΑΣ

* Απαιτείται τροφοδοτικό ATX

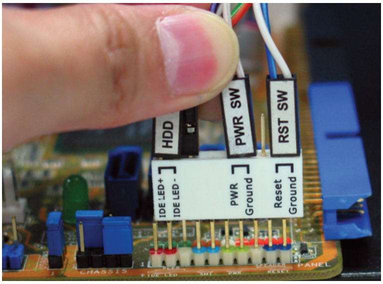
Ακροδέκτης πρόσοψης 10-1 ακίδων


M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
ΓΕΙΩΣΗ
F_PANEL
IDELED+
IDELED-
Γείωση
Επαναφορά ρυθμίσεων
HD LED
ΕΠΑΝΑΦΟΡΑ

- Τα καλώδια μπροστινής πλευράς του περιβλήματός σας μπορεί να διαφέρουν ανάλογα με το μοντέλο ή το σχεδιασμό. Συνδέστε τους ακροδέκτες στη μητρική κάρτα ανάλογα με τις ετικέτες.
- Αν οι λυχνίες LED δεν ανάβουν και η θέση των ακίδων είναι σωστή, μπορεί να έχετε μπερδέψει τις ακίδες γείωσης με τις ακίδες σήματος. Συνήθως τα λευκά σύρματα αφορούν τις ακίδες γείωσης και τα έγχρωμα τις ακίδες σήματος.
- Τα καλώδια πρόσοψης SPEAKER (ΗΧΕΙΟ), RESET (ΕΠΑΝΑΦΟΡΑ) και PWRSW (ΔΙΑΚΟΠΤΗΣ ΤΡΟΦΟΔΟΣΙΑΣ) δεν έχουν συγκεκριμένο προσανατολισμό, ενώ τα καλώδια IDE_LED και PLED έχουν. Συνδέστε το καλώδιο PIN1 στον ακροδέκτη PIN1 στη μητρική κάρτα.
- Ο ακροδέκτης πρόσοψης διαφέρει ανάλογα με το μοντέλο της μητρικής κάρτας, ανατρέξτε στον οδηγό χρήστη για περισσότερες πληροφορίες.

ASUS Q-Connector

Το ASUS Q-Connector παρέχει εγκατάσταση σε ένα βήμα και σας εξοικονομεί χρόνο στην προσπάθεια να τακτοποιήσετε τα περίπλοκα μπροστινά καλώδια. Ανατρέξτε στον οδηγό χρήστη για λεπτομέρειες.

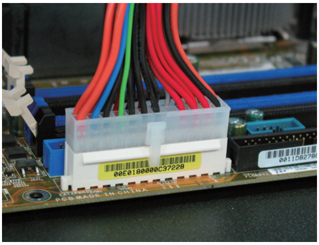


Ο ακροδέκτης "Q-connector" διατίθεται σε επιλεγμένα μοντέλα. Ανατρέξτε στον οδηγό χρήστη για λεπτομέρειες.

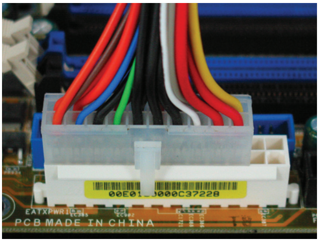
1.9 Σύνδεση τροφοδοσίας ATX

Οι ακροδέκτες τροφοδοσίας ATX συνδέονται μόνο σε μια κατεύθυνση. Χρησιμοποιήστε το πλαϊνό κλιπ για να στερεώσετε τους ακροδέκτες στη μητρική κάρτα. ΜΗΝ υπερβάλλετε κατά τη σύνδεση των αρσενικών ακροδεκτών τροφοδοσίας στις θηλυκές υποδοχές στη μητρική κάρτα. Συνήθως θα υπάρχουν δύο ακροδέκτες στη μητρική κάρτα: Ακροδέκτες τροφοδοσίας 24 ακίδων και 4 ακίδων. Μερικά παλαιότερα τροφοδοτικά μπορεί να διαθέτουν ακροδέκτες τροφοδοσίας 20 ακίδων οι οποίοι επίσης ταιριάζουν στους ακροδέκτες τροφοοδσίας 24 ακίδων στη μητρική κάρτα.

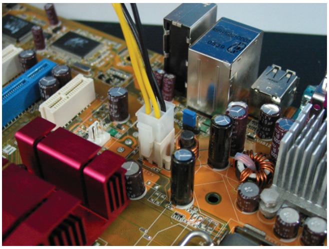
Ακροδέκτης τροφοδοσίας 24 ακίδων



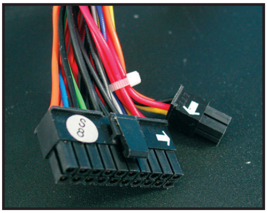
Ακροδέκτης τροφοδοσίας 20 ακίδων (στο θηλυκό τμήμα 24 ακίδων)

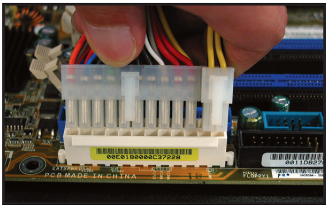


Ακροδέκτης τροφοδοσίας 4 ακίδων



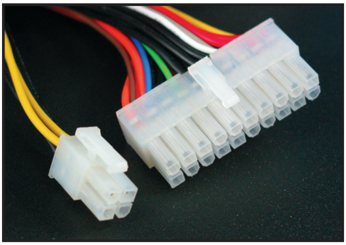
- ΜΗΝ συνδέετε την εξωτερική τροφοδοσία AC όταν συνδέετε τους ακροδέκτες τροφοδοσίας στη μητρική κάρτα.
- Βεβαιωθείτε ότι οι ακροδέκτες τροφοδοσίας είναι στέρεα συνδεδεμένοι στη μητρική κάρτα.
- Αν το τροφοδοτικό σας υποστηρίζει 20-ακίδες+4-ακίδες, μπορείτε να συνδυάσετε αυτούς τους δύο ακροδέκτες και να τους εγκαταστήσετε στους ακροδέκτες 24 ακίδων στη μητρική κάρτα.



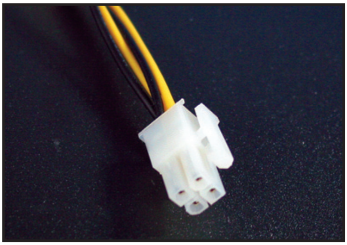


Ακροδέκτες τροφοδοσίας

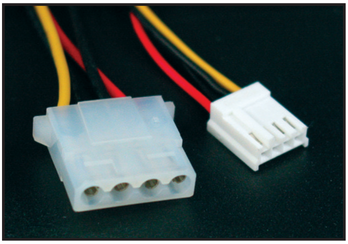
Ακροδέκτης ATX με 20+4 (24) ακίδες



Ακροδέκτης τροφοδοσίας ATX 4 ακίδων

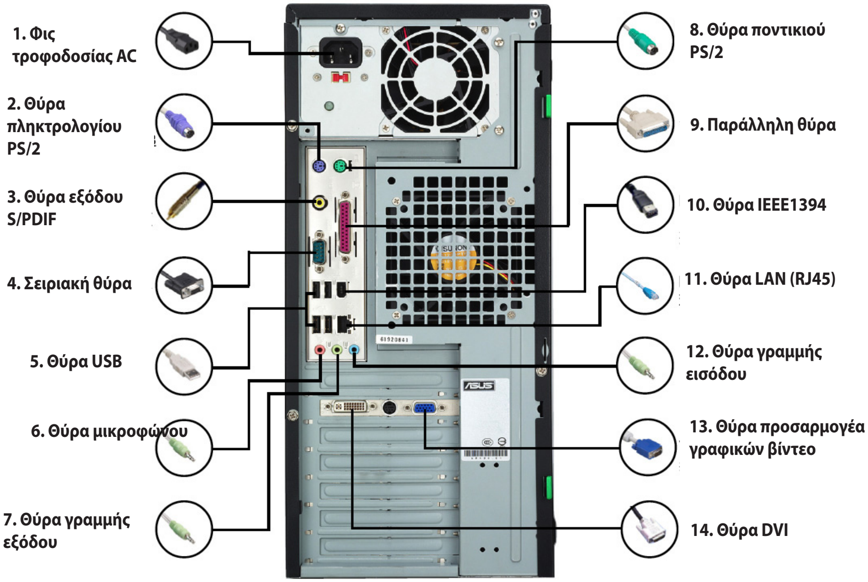


ακροδέκτης τροφοδοσίας περιφερειακού (αριστερά)
ακροδέκτης τροφοδοσίας μονάδας δισκέττας (δεξιά)



1.10 Περιφερειακές συσκευές και αξεσουάρ

Ανατρέξτε στο σχήμα για τη σύνδεση των περιφερειακών συσκευών και αξεσουάρ.


1. Φις τροφοδοσίας AC
2. Θύρα πληκτρολογίου PS/2
3. Θύρα εξόδου S/PDIF
4. Σειριακή θύρα
5. Θύρα USB
6. Θύρα μικροφώνου
7. Θύρα γραμμής εξόδου
8. Θύρα ποντικιού PS/2
9. Παράλληλη θύρα
10. Θύρα IEEE1394
11. Θύρα LAN (RJ45)
12. Θύρα γραμμής εισόδου
13. Θύρα προσαρμογέα γραφικών βίντεο
14. Θύρα DVI

1. Φις τροφοδοσίας AC + καλώδιο επέκτασης

2. Θύρα πληκτρολογίου PS/2 + πληκτρολόγιο

3. Θύρα εξόδου S/PDIF + ψηφιακό ηχητικό σύστημα 5.1

4. Σειριακή θύρα + βάση σύνδεσης PDA

5. Θύρα USB + συσκευές USB

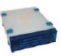
6. Θύρα μικροφώνου + μικρόφωνο

7. Θύρα γραμμής εξόδου + ηχείο

8. Θύρα ποντικιού PS/2 + ποντίκι

9. Παράλληλη θύρα + εκτυπωτής

10. Θύρα IEEE1394 + εξωτερική μονάδα σκληρού δίσκου



11. Θύρα LAN (RJ45) + μόντεμ

12. Θύρα γραμμής εισόδου + συσκευή εγγραφής

13. Θύρα VGA + οθόνη CRT

14. Θύρα DVI + οθόνη LCD

Οι ακροδέκτες πίσω πλευράς διαφέρουν ανάλογα με το μοντέλο. Ανατρέξτε στον οδηγό χρήστη για λεπτομέρειες.

1.11 Εκκίνηση για πρώτη φορά

Το σύστημα θα εκτελέσει το αυτοδιαγνωστικό πρόγραμμα εκκίνησης γνωστό ως POST. Κατά τη διάρκεια της εκτέλεσης του αυτοδιαγνωστικού προγράμματος ακούγεται ένας ήχος μπιπ από το BIOS.

Ήχοι BIOS	Περιγραφή
Ένας συνεχόμενος ήχος μπιπ που ακολουθείται από τρεις ήχους μικρής διάρκειας	Δεν ανιχνεύτηκε VGA
Ένας συνεχόμενος ήχος μπιπ που ακολουθείται από δύο ήχους μικρής διάρκειας και μια παύση (επαναλαμβανόμενο)	Δεν ανιχνεύτηκε μνήμη
Ένας συνεχόμενος ήχος μπιπ που ακολουθείται από τέσσερις ήχους μικρής διάρκειας	Σφάλμα σε εξοπλισμό υλικού (AMI BIOS)
Τέσσερις ήχοι μπιπ μικρής διάρκειας	Σφάλμα σε εξοπλισμό υλικού (AWARD BIOS)

Αντιμετώπιση προβλημάτων

Πρόβλημα	Ενέργεια
• Δεν είναι δυνατή η ενεργοποίηση του υπολογιστή • Η λυχνία LED ενεργοποίησης δεν ανάβει. • Ο ανεμιστήρας τροφοδοτικού δεν λειτουργεί.	Βεβαιωθείτε ότι το καλώδιο τροφοδοσίας είναι σωστά συνδεδεμένο.
Ο υπολογιστής είναι ενεργοποιημένος αλλά η οθόνη είναι σβηστή.	• Βεβαιωθείτε ότι η οθόνη είναι ενεργοποιημένη και το καλώδιο VGA σωστά συνδεδεμένο. • Ρυθμίστε τη φωτεινότητα και την αντίθεση της οθόνης. • Τερματίστε τη λειτουργία του υπολογιστή και αποσυνδέστε το καλώδιο τροφοδοσίας. Ελέγξτε αν η κάρτα VGA είναι σωστά εγκατεστημένη.
Δεν ανιχνεύτηκε μνήμη	• Βεβαιωθείτε ότι το στοιχείο μνήμης είναι σωστό. • Σιγουρευτείτε ότι οι DIMMS έχουν τοποθετηθεί σωστά στην υποδοχή DIMM. • Βεβαιωθείτε ότι το στοιχείο μνήμης ανήκει στη λίστα των πιστοποιημένων προμηθευτών. Ανατρέξτε στον οδηγό χρήστη για τη λίστα πιστοποιημένων προμηθευτών.
Σφάλμα δισκέττας (Η ένδειξη ανάβει συνέχεια ή εμφανίζεται στην οθόνη ένα μήνυμα προειδοποίησης.)	• Ελέγξτε τη διαμόρφωση του BIOS σχετικά με τη μονάδα δισκέττας. • Βεβαιωθείτε ότι τα καλώδια για τη μονάδα δισκέττας είναι σωστά συνδεδεμένα.
Σφάλμα μονάδας σκληρού/οπτικού δίσκου (δεν αναγνωρίζεται ή δεν ανιχνεύεται)	• Βεβαιωθείτε ότι οι ρυθμίσεις των βραχυκυκλωτήρων (jumper) είναι σωστές. (Κύριο/Δευτερεύον) • Ελέγξτε τη διαμόρφωση του BIOS σχετικά με τη μονάδα σκληρού/οπτικού δίσκου. • Βεβαιωθείτε ότι τα καλώδια της συσκευής είναι καλά συνδεδεμένα. • Βεβαιωθείτε ότι έχουν εγκατασταθεί τα προγράμματα οδήγησης των συσκευών.

Κεφάλαιο 2: Διαχείριση/αναβάθμιση BIOS

2.1 Βοηθητικό πρόγραμμα AFUDOS

Το βοηθητικό πρόγραμμα AFUDOS σας επιτρέπει να ενημερώνετε το αρχείο BIOS σε περιβάλλον DOS με μια δισκέττα με δυνατότητα εκκίνησης με το ενημερωμένο αρχείο BIOS. Αυτό το βοηθητικό πρόγραμμα σας επιτρέπει να αντιγράψετε το τρέχον αρχείο BIOS για να το χρησιμοποιήσετε ως εφεδρικό αρχείο όταν συμβεί σφάλμα του BIOS ή καταστραφεί κατά τη διάρκεια της διαδικασίας ενημέρωσης.

Αντιγραφή του τρέχοντος BIOS

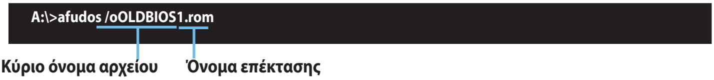
Για να αντιγράψετε το τρέχον αρχείο BIOS χρησιμοποιώντας το βοηθητικό πρόγραμμα AFUDOS:

- Βεβαιωθείτε ότι η μονάδα δισκέττας δεν διαθέτει προστασία από εγγραφή και διαθέτει ελέυθερο χώρο τουλάχιστον 1024KB για να αποθηκεύσετε το αρχείο.
- Οι οθόνες του BIOS που ακολουθούν είναι αποκλειστικά για αναφορά. Οι πραγματικές οθόνες του BIOS ενδέχεται να μην είναι ίδιες με αυτές που εμφανίζονται.

1. Αντιγράψτε το βοηθητικό πρόγραμμα AFUDOS (afudos.exe) από το CD/DVD υποστήριξης της μητρικής κάρτας σε μια δισκέττα με δυνατότητα εκκίνησης.
2. Εκκινήστε το σύστημα σε κατάσταση DOS, στη συνέχεια όταν σας ζητηθεί πληκτρολογήστε:

   afudos /o[όνομα αρχείου]

   το [όνομα αρχείου] είναι οποιοδήποτε όνομα αρχείου που έχει δώσει ο χρήστης και αποτελείται από έως οκτώ αλφαριθμητικούς χαρακτήρες για το κύριο όνομα αρχείου και τρεις αλφαριθμητικούς χαρακτήρες για το όνομα της επέκτασης.



```
A:\>afudos /oOLDBIOS1.rom
```

3. Πατήστε <Enter>. Το βοηθητικό πρόγραμμα αντιγράφει το τρέχον αρχείο BIOS στη δισκέττα.

```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
     Reading flash ..... done
     Write to file...... ok
A:\>
```

   Το βοηθητικό πρόγραμμα επιστρέφει στη γραμμή εντολών του DOS αφού αντιγράψει το τρέχον αρχείο BIOS.

Ενημέρωση του αρχείου BIOS

Για να ενημερώσετε το αρχείο BIOS χρησιμοποιώντας το βοηθητικό πρόγραμμα AFUDOS:

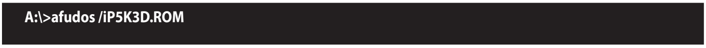
1. Επισκεφτείτε τον ιστότοπο της ASUS (www.asus.com) και κάντε λήψη του πιο πρόσφατου αρχείου BIOS για τη μητρική κάρτα. Αποθηκεύστε το αρχείο BIOS σε μια δισκέττα με δυνατότητα εκκίνησης.

Γράψτε το όνομα αρχείου του BIOS σε ένα χαρτί. Πρέπει να πληκτρολογήσετε το ακριβές όνομα αρχείου του BIOS στη γραμμή εντολών του DOS.

2. Αντιγράψτε το βοηθητικό πρόγραμμα AFUDOS (afudos.exe) από το CD/DVD υποστήριξης της μητρικής κάρτας στη δισκέττα με δυνατότητα εκκίνησης που δημιουργήσατε προηγουμένως.
3. Εκκινήστε το σύστημα σε κατάσταση DOS, στη συνέχεια όταν σας ζητηθεί πληκτρολογήστε:

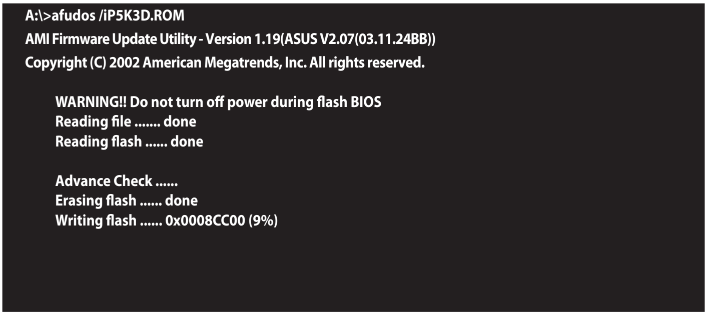
   afudos /i[όνομα αρχείου]

   το [όνομα αρχείου] είναι το πιο πρόσφατο ή το αρχικό αρχείο BIOS στη δισκέττα με δυνατότητα εκκίνησης.



```
A:\>afudos /iP5K3D.ROM
```

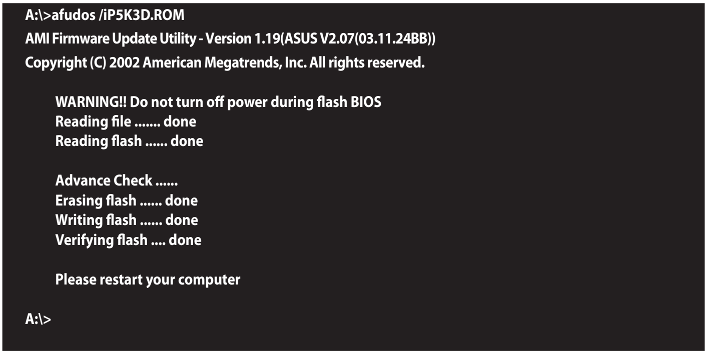
4. Το βοηθητικό πρόγραμμα θα επαληθεύσει το αρχείο και θα ξεκινήσει την ενημέρωση του BIOS.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

     WARNING!! Do not turn off power during flash BIOS
     Reading file ....... done
     Reading flash ...... done

     Advance Check ......
     Erasing flash ...... done
     Writing flash ...... 0x0008CC00 (9%)
```

ΜΗΝ τερματίσετε τη λειτουργία ή μην πραγματοποιήσετε επαναφορά του συστήματος κατά την ενημέρωση του BIOS για να αποφύγετε σφάλμα εκκίνησης του συστήματος!

5. Το βοηθητικό πρόγραμμα επιστρέφει στη γραμμή εντολών DOS όταν ολοκληρωθεί η διαδικασία ενημέρωσης του BIOS. Κάντε επανεκκίνηση του συστήματος από τη μονάδα σκληρού δίσκου.



```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

     WARNING!! Do not turn off power during flash BIOS
     Reading file ....... done
     Reading flash ...... done

     Advance Check ......
     Erasing flash ...... done
     Writing flash ...... done
     Verifying flash .... done

     Please restart your computer

A:\>
```

2.2 Βοηθητικό πρόγραμμα Award BIOS Flash

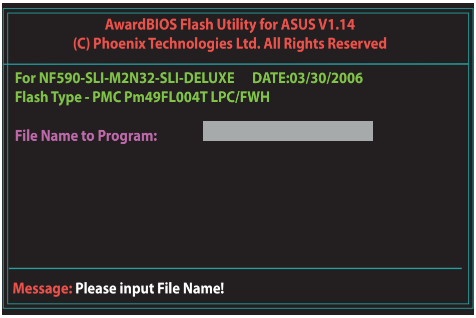
Ενημέρωση του BIOS

Μπορείτε να ενημερώσετε το βασικό σύστημα εισόδου/εξόδου (BIOS) με το βοηθητικό πρόγραμμα AwardBIOS Flash. Ακολουθήστε τις παρακάτω οδηγίες για να ενημερώσετε το BIOS χρησιμοποιώντας αυτό το βοηθητικό πρόγραμμα.

1. Κάντε λήψη του πιο πρόσφατου αρχείου BIOS από τον ιστότοπο της ASUS. Μετονομάστε το αρχείο σε XXXXX.BIN (όνομα μοντέλου.BIN) και αποθηκεύστε το σε μια δισκέττα, CD ROM ή δίσκο USB flash με **διαμόρφωση FAT 16/12**.

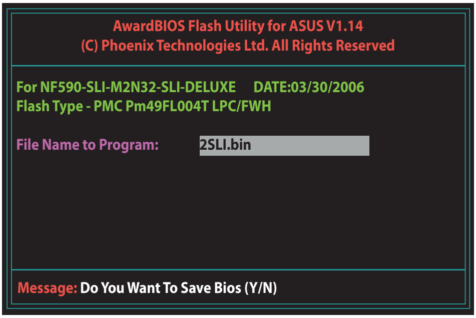
Αποθηκεύστε μόνο το ενημερωμένο αρχείο BIOS στο δίσκο για να αποφύγετε τη φόρτωση λανθασμένου αρχείου BIOS.

2. Αντιγράψτε το βοηθητικό πρόγραμμα AwardBIOS Flash (awdflash.exe) από το φάκελο λογισμικού του CD υποστήριξης στη δισκέττα, στο CD ROM ή στο δίσκο USB flash με το πιο πρόσφατο αρχείο BIOS.
3. Κάντε επανεκκίνηση του συστήματος σε κατάσταση DOS χρησιμοποιώντας τη δισκέττα με δυνατότητα εκκίνησης, το CD ROM ή το δίσκο USB flash που δημιουργήσατε προηγουμένως.
4. Στη λειτουργία DOS, χρησιμοποιήστε <X:> (το X αντιστοιχεί στο όνομα του αντίστοιχου δίσκου) για να μεταβείτε στο φάκελο της δισκέττας, του CD ROM ή του δίσκου USB flash που αποθηκεύσατε το αρχείο BIOS και το βοηθητικό πρόγραμμα AwardBIOS Flash.
5. Στη γραμμή εντολών, πληκτρολογήστε awdflash και πατήστε <Enter>.
   Εμφανίζεται η οθόνη του βοηθητικού προγράμματος Award BIOS Flash.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

6. Πληκτρολογήστε το όνομα του αρχείου BIOS στο Όνομα Αρχείου στο πεδίο Προγράμματος και πατήστε <Enter>.



AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

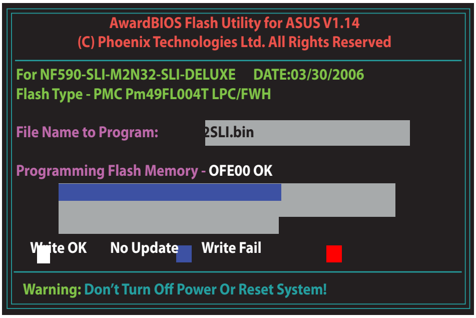
For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 2SLI.bin

Message: Do You Want To Save Bios (Y/N)

7. Πατήστε <N> όταν το βοηθητικό πρόγραμμα σας ζητήσει να αποθηκεύσετε το τρέχον αρχείο BIOS. Εμφανίζεται η ακόλουθη οθόνη.

8. Το βοηθητικό πρόγραμμα επαληθεύει το αρχείο BIOS στη δισκέττα, στο CD ROM ή στο δίσκο USB flash και ξεκινά να αποστέλει το αρχείο BIOS.



AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 2SLI.bin

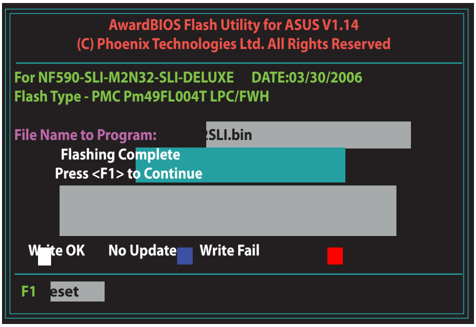
Programming Flash Memory - OFE00 OK

Write OK ⬜ No Update 🟦 Write Fail 🟥

Warning: Don't Turn Off Power Or Reset System!

ΜΗΝ απενεργοποιείτε ή επαναφέρετε το σύστημα κατά τη διάρκεια της διαδικασίας αποστολής!

9. Το βοηθητικό πρόγραμμα εμφανίζει ένα μήνυμα Flashing Complete (Ολοκλήρωση αποστολής) που υποδεικνύει ότι το αρχείο BIOS στάλθηκε με επιτυχία. Αφαιρέστε το δίσκο και πατήστε <F1> για επανεκκίνηση του συστήματος.



AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: SLI.bin

Flashing Complete
Press <F1> to Continue

Write OK ⬜ No Update 🟦 Write Fail 🟥

F1 eset

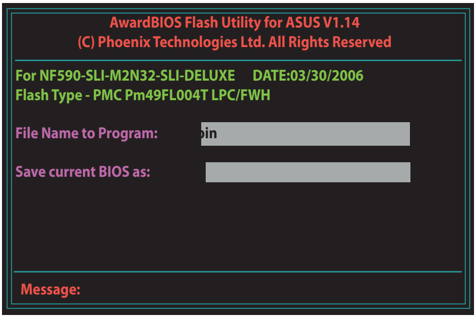
Αποθήκευση του τρέχοντος αρχείου BIOS

Μπορείτε να χρησιμοποιήσετε το βοηθητικό πρόγραμμα AwardBIOS Flash για να αποθηκεύσετε το τρέχον αρχείο BIOS. Μπορείτε να φορτώσετε το τρέχον αρχείο BIOS όταν το αρχείο BIOS καταστραφεί κατά τη διάρκεια της διαδικασίας αποστολής.

Βεβαιωθείτε ότι η δισκέττα, το CD ROM ή ο δίσκος USB flash διαθέτει αρκετό χώρο στο δίσκο για να αποθηκεύσετε το αρχείο.

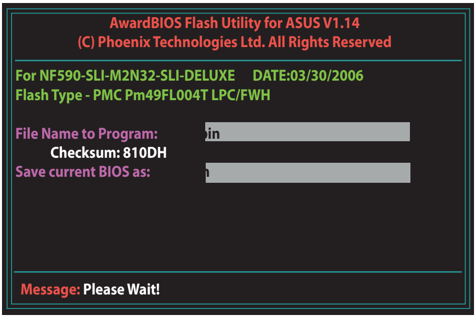
Για να αποθηκεύσετε το τρέχον αρχείο BIOS χρησιμοποιώντας το βοηθητικό πρόγραμμα AwardBIOS Flash:

1. Ακολουθήστε τα βήματα 1 έως 6 της προηγούμενης ενότητας.
2. Πατήστε <Y> όταν το βοηθητικό πρόγραμμα σας ζητήσει να αποθηκεύσετε το τρέχον αρχείο BIOS. Εμφανίζεται η ακόλουθη οθόνη.



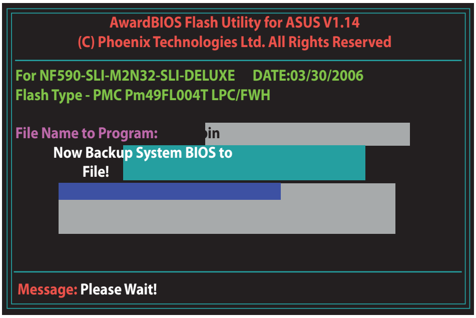
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:          in

Save current BIOS as:

Message:
```

3. Πληκτρολογήστε ένα όνομα αρχείου για το τρέχον αρχείο BIOS στην επιλογή Αποθήκευση τρέχοντος BIOS ως πεδίο και πατήστε <Enter>.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:          in
        Checksum: 810DH
Save current BIOS as:

Message: Please Wait!
```

4. Το βοηθητικό πρόγραμμα αποθηκεύει το τρέχον αρχείο BIOS στο δίσκο, στη συνέχεια επιστρέφει στη διαδικασία αποστολής του BIOS.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE     DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:          in
        Now Backup System BIOS to
              File!

Message: Please Wait!
```

2.3 Βοηθητικό πρόγραμμα ενημέρωσης ASUS Update

Το βοηθητικό πρόγραμμα ASUS Update σας επιτρέπει τη διαχείριση, αποθήκευση και ενημέρωση του BIOS της μητρικής κάρτας σε περιβάλλον Windows®. Το βοηθητικό πρόγραμμα ASUS Update σας επιτρέπει να:

- Αποθηκεύσετε το τρέχον αρχείο BIOS
- Κάνετε λήψη του πιο πρόσφατου αρχείου BIOS από το Internet
- Ενημερώσετε το BIOS από ένα ενημερωμένο αρχείο BIOS
- Ενημερώσετε το BIOS απευθείας από το Internet
- Προβάλετε πληροφορίες για την έκδοση του BIOS

Αυτό το βοηθητικό πρόγραμμα διατίθεται στο DVD υποστήριξης που παρέχεται στη συσκευασία της μητρικής κάρτας.

Το ASUS Update απαιτεί σύνδεση με το Internet είτε μέσω δικτύου είτε μέσω παρόχου υπηρεσιών Internet (ISP).

Εγκατάσταση του ASUS Update

Για να εγκαταστήσετε το ASUS Update:

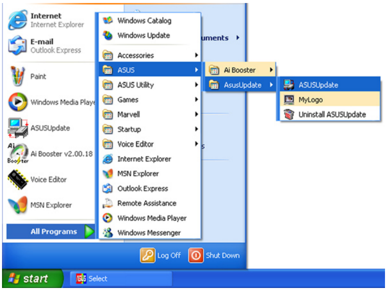
1. Τοποθετήστε το DVD υποστήριξης στη μονάδα οπτικού δίσκου.
2. Από το μενού **Main (Βασικό)**, κάντε κλικ στην καρτέλα **Utilities (Βοηθητικά προγράμματα)** και κάντε κλικ στην επιλογή **Install ASUS Update VX.XX.XX (Εγκατάσταση ASUS Update VX.XX.XX)**.
3. Το βοηθητικό πρόγραμμα ASUS Update έχει αντιγραφεί στο σύστημά σας.

Ενημέρωση του BIOS μέσω Internet

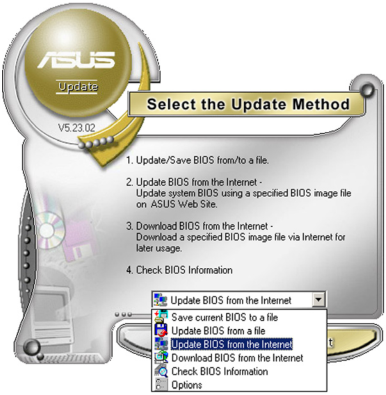
Κλείστε όλες τις εφαρμογές των Windows® πριν ενημερώσετε το BIOS με αυτό το βοηθητικό πρόγραμμα.

Για να ενημερώσετε το BIOS μέσω του Internet

1. Από την επιφάνεια εργασίας των Windows®, κάντε κλικ στο **Start (Έναρξη) > Programs (Όλα τα προγράμματα) > ASUS > ASUSUpdate > ASUSUpdate.** Εμφανίζεται το βασικό παράθυρο του ASUS Update.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

2. Επιλέξτε **Update BIOS from the Internet (Ενημέρωση BIOS από το Internet)** από το αναπτυσσόμενο -μενού και κάντε κλικ στο **Next (Επόμενο)**.


ASUS
Update
V5.23.02

Select the Update Method

1. Update/Save BIOS from/to a file.

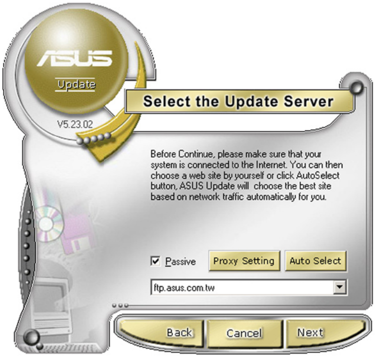
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

3. Επιλέξτε την πλησιέστερη σε εσάς τοποθεσία ASUS FTP για να αποφύγετε την κυκλοφορία του δικτύου, ή κάντε κλικ στο **Auto Select (Αυτόματη επιλογή)**. Κάντε κλικ στο **Next (Επόμενο)**.


ASUS
Update
V5.23.02

Select the Update Server

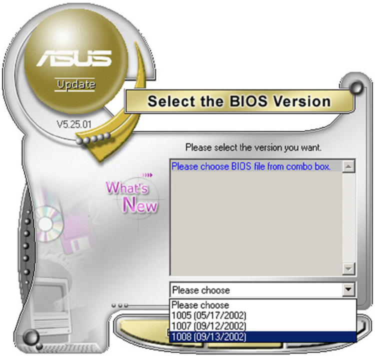
Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

ftp.asus.com.tw

Proxy Setting
Auto Select
Back
Cancel
Next

4. Από την τοποθεσία FTP, επιλέξτε την έκδοση BIOS την οποία θέλετε να λάβετε. Κάντε κλικ στο **Next (Επόμενο)**.


ASUS
Update
V5.25.01
What's New

Select the BIOS Version

Please select the version you want.

Please choose BIOS file from combo box.

Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

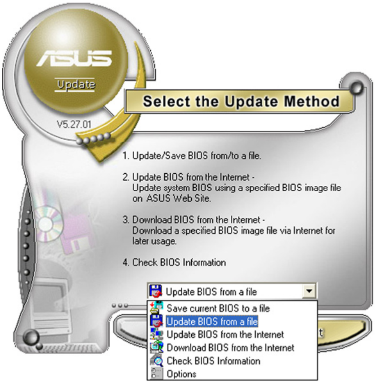
5. Ακολουθήστε τις οδηγίες που εμφανίζονται στην οθόνη για να ολοκληρώσετε τη διαδικασία ενημέρωσης.

Το βοηθητικό πρόγραμμα ASUS Update έχει τη δυνατότητα αυτο-ενημέρωσης μέσω του Internet. Να ενημερώνετε πάντα το βοηθητικό πρόγραμμα για να επωφεληθείτε από όλες τις δυνατότητές του.

Ενημέρωση του BIOS μέσω ενός αρχείου BIOS

Για να ενημερώσετε το BIOS μέσω ενός αρχείου BIOS

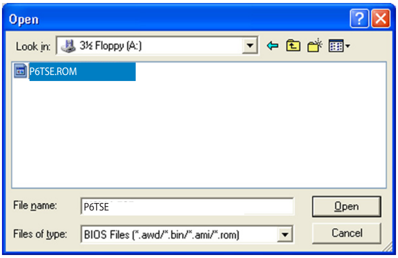
1. Από την επιφάνεια εργασίας των Windows®, κάντε κλικ στο **Start (Έναρξη)** > **Programs (Όλα τα προγράμματα)** > **ASUS** > **ASUSUpdate** > **ASUSUpdate**. Εμφανίζεται το βασικό παράθυρο του ASUS Update.
2. Επιλέξτε **Update BIOS from a file (Ενημέρωση BIOS από αρχείο)** από το αναπτυσσόμενο μενού, και κάντε κλικ στο **Next (Επόμενο)**.
3. Εντοπίστε το αρχείο BIOS από το παράθυρο Άνοιγμα και κάντε κλικ στο **Open (Άνοιγμα)**.


ASUS
Update
V5.27.01
Select the Update Method

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

4. Ακολουθήστε τις οδηγίες που εμφανίζονται στην οθόνη για να ολοκληρώσετε τη διαδικασία ενημέρωσης.


Open
P6TSE.ROM
Open
Cancel

Look in: 3½ Floppy (A:)
File name: P6TSE
Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Βεβαιωθείτε ότι έχετε φορτώσει τις προεπιλεγμένες ρυθμίσεις του BIOS για να διασφαλίσετε τη συμβατότητα και σταθερότητα του συστήματος. Επιλέξτε το στοιχείο **Load Setup Defaults (Φόρτωση προεπιλεγμένων ρυθμίσεων εγκατάστασης)** στο μενού **Exit (Έξοδος)**.

2.4 ASUS BIOS Updater

Το ASUS BIOS Updater σας επιτρέπει να ενημερώνετε το BIOS σε περιβάλλον DOS. Αυτό το βοηθητικό πρόγραμμα σας επιτρέπει επίσης να αντιγράψετε το τρέχον αρχείο BIOS για να το χρησιμοποιήσετε ως εφεδρικό αρχείο όταν συμβεί σφάλμα του BIOS ή αν καταστραφεί κατά τη διάρκεια της διαδικασίας ενημέρωσης.

Οι οθόνες που ακολουθούν είναι αποκλειστικά για αναφορά. Οι πραγματικές οθόνες του βοηθητικού προγράμματος ενδέχεται να μην είναι ίδιες με αυτές που εμφανίζονται.

Πριν από την ενημέρωση του BIOS

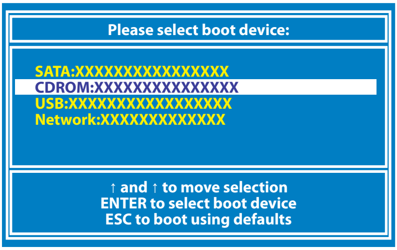
1. Προετοιμάστε το DVD υποστήριξης μητρικής κάρτας και ένα δίσκο USB flash με διαμόρφωση FAT32/16 και ένα μόνο διαμέρισμα.
2. Κάντε λήψη του πιο πρόσφατου αρχείου BIOS και του BIOS Updater από τον ιστότοπο της ASUS από τη διεύθυνση http://support.asus.com και αποθηκεύστε τα στο δίσκο USB flash.

- Το σύστημα NTFS δεν υποστηρίζεται σε περιβάλλον DOS. Μην αποθηκεύετε το αρχείο BIOS και το BIOS Updater σε σκληρό δίσκο ή δίσκο USB flash με διαμόρφωση NTFS.
- Μην αποθηκεύετε το αρχείο BIOS σε δισκέττα λόγω μικρής χωρητικότητας της δισκέττας.

3. Απενεργοποιήστε τον υπολογιστή και αποσυνδέστε όλες τις μονάδες σκληρού δίσκου SATA (προαιρετικό).

Εκκίνηση του συστήματος σε περιβάλλον DOS

1. Εισάγετε το δίσκο USB flash με το πιο πρόσφατο αρχείο BIOS και το BIOS Updater στη θύρα USB.
2. Κάντε επανεκκίνηση του υπολογιστή. Όταν εμφανιστεί το λογότυπο της ASUS, πατήστε <F8> για να εμφανιστεί το **BIOS Boot Device Select Menu (Μενού επιλογής συσκευής εκκίνησης BIOS)**. Εισάγετε το DVD υποστήριξης στη μονάδα οπτικού δίσκου και επιλέξτε την οπτική μονάδα ως μονάδα εκκίνησης.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

↑ and ↑ to move selection
ENTER to select boot device
ESC to boot using defaults
```

3. Όταν εμφανιστεί το μενού **Make Disk (Δημιουργία δίσκου)**, επιλέξτε το στοιχείο **FreeDOS command prompt (Γραμμή εντολών FreeDOS)** πατώντας τον αριθμό του στοιχείου.
4. Στη γραμμή εντολών FreeDOS, πληκτρολογήστε **d:** και πατήστε <Enter> για να αλλάξετε δίσκο από τη μονάδα C (μονάδα οπτικού δίσκου) στη μονάδα D (μονάδα USB flash).

```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

Δημιουργία αντιγράφου ασφαλείας του τρέχοντος BIOS

Για να δημιουργήσετε αντίγραφο ασφαλείας του τρέχοντος αρχείου BIOS με το BIOS Updater

Βεβαιωθείτε ότι η μονάδα δίσκου USB flash δεν διαθέτει προστασία από εγγραφή και διαθέτει επαρκή ελεύθερο χώρο στο δίσκο για να αποθηκεύσετε το αρχείο.

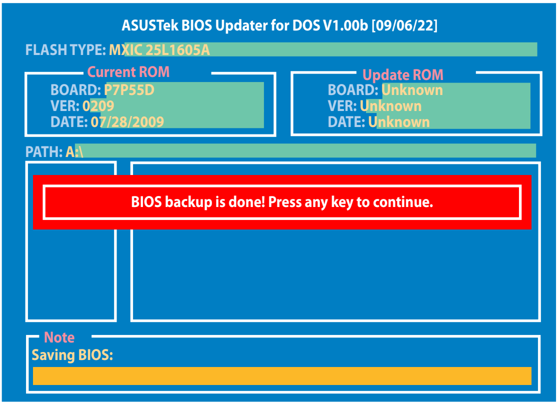
1. Στη γραμμή εντολών FreeDOS, πληκτρολογήστε **bupdater /o[όνομα αρχείου]** και πατήστε <Enter>.

```
D:\>bupdater /oOLDBIOS1.rom
```

Όνομα αρχείου **Επέκταση**

Το [όνομα αρχείου] είναι οποιοδήποτε όνομα αρχείου που έχει δώσει ο χρήστης και αποτελείται από έως οκτώ αλφαριθμητικούς χαρακτήρες για το κύριο όνομα αρχείου και τρεις αλφαριθμητικούς χαρακτήρες για το όνομα της επέκτασης.

2. Η οθόνη αντιγράφων ασφαλείας του BIOS Updater εμφανίζεται υποδεικνύοντας τη διαδικασίας δημιουργίας αντιγράφων ασφαλείας του BIOS. Όταν ολοκληρωθεί η δημιουργία δημιουργίας αντιγράφων ασφαλείας του BIOS, πατήστε οποιοδήποτε κουμπί για να επιστρέψετε στη γραμμή εντολών DOS.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                      Update ROM
BOARD: P7P55D                    BOARD: Unknown
VER: 0209                        VER: Unknown
DATE: 07/28/2009                 DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

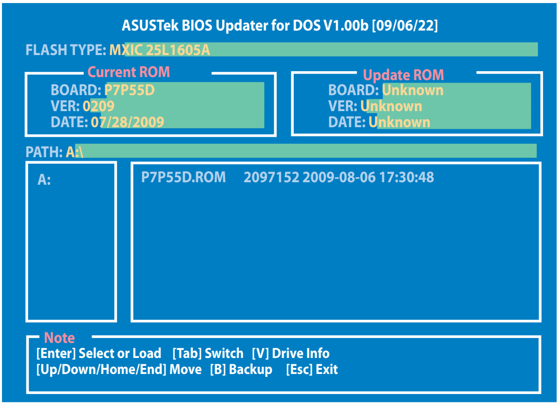
Ενημέρωση του αρχείου BIOS

Για να ενημερώσετε το αρχείο BIOS με το BIOS Updater

1. Στη γραμμή εντολών FreeDOS, πληκτρολογήστε **bupdater /pc /g** και πατήστε <Enter>.

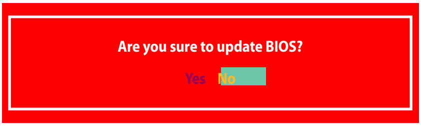
```
D:\>bupdater /pc /g
```

2. Εμφανίζεται η οθόνη του BIOS Updater όπως φαίνεται παρακάτω.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
  Current ROM                       Update ROM
  BOARD: P7P55D                     BOARD: Unknown
  VER: 0209                         VER: Unknown
  DATE: 07/28/2009                  DATE: Unknown
PATH: A:\
 A:          P7P55D.ROM    2097152 2009-08-06 17:30:48

 Note
 [Enter] Select or Load   [Tab] Switch   [V] Drive Info
 [Up/Down/Home/End] Move  [B] Backup     [Esc] Exit
```

3. Πατήστε το πλήκτρο <Tab> για εναλλαγή μεταξύ των πεδίων της οθόνης και με τα πλήκτρα <Πάνω/Κάτω/Home/End> επιλέξτε το αρχείο BIOS και πατήστε <Enter>. Το BIOS Updater ελέγχει το επιλεγμένο αρχείο BIOS και σας ζητά να επιβεβαιώσετε την ενημέρωση του BIOS.



```
Are you sure to update BIOS?
Yes  No
```

4. Επιλέξτε **Yes (Ναι)** και πατήστε <Enter>. Όταν η ενημέρωση του BIOS ολοκληρωθεί, πατήστε <ESC> για έξοδο από το BIOS Updater. Κάντε επανεκκίνηση του υπολογιστή.

ΜΗΝ τερματίσετε τη λειτουργία ή μην πραγματοποιήσετε επαναφορά του συστήματος κατά την ενημέρωση του BIOS για να αποφύγετε σφάλμα εκκίνησης του συστήματος!

- Για το BIOS Updater έκδοση 1.04 ή νεότερο, το βοηθητικό πρόγραμμα θα μεταβεί στη γραμμή εντολών DOS μετά την ενημέρωση του BIOS.
- Βεβαιωθείτε ότι έχετε φορτώσει τις προεπιλεγμένες ρυθμίσεις του BIOS για να διασφαλίσετε τη συμβατότητα και σταθερότητα του συστήματος. Επιλέξτε το στοιχείο **Load Setup Defaults (Φόρτωση προεπιλεγμένων ρυθμίσεων εγκατάστασης)** στο μενού του BIOS **Exit (Έξοδος)**. Ανατρέξτε στο Κεφάλαιο 3 του εγχειριδίου χρήστη της μητρικής κάρτας για περισσότερες λεπτομέρειες.
- Βεβαιωθείτε ότι έχετε συνδέσει όλες τις μονάδες σκληρών δίσκων SATA μετά την ενημέρωση του αρχείου BIOS αν τις έχετε αποσυνδέσει.

Κεφάλαιο 3: Αντιμετώπιση προβλημάτων

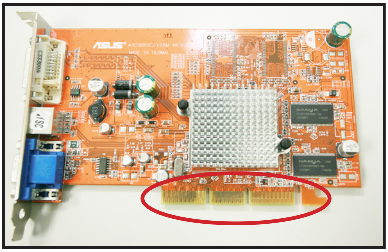
3.1 Αντιμετώπιση προβλημάτων για τη μητρική κάρτα (DIY)

Μετά τη συναρμολόγηση του υπολογιστή σας, ενδέχεται να αντιμετωπίσετε προβλήματα κατά την εκκίνηση. Στο κεφάλαιο αυτό παρέχονται απαντήσεις σε μερικές συνήθεις ερωτήσεις σχετικά με τον Η/Υ πριν την εισαγωγή στο λειτουργικό σύστημα. Διαβάστε αυτό το κεφάλαιο για την αντιμετώπιση βασικών προβλημάτων. Εξοικονομείτε χρόνο και θα σας βοηθήσει όταν επικοινωνήσετε με την ομάδα τεχνικής υποστήριξης της ASUS ή όταν επιστρέψετε το προϊόν για σέρβις στα πλαίσια της εγγύησης.

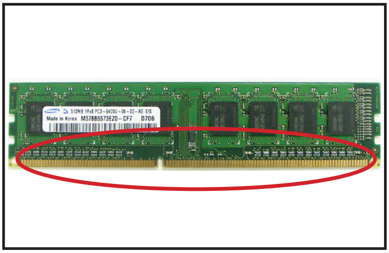
3.1.1 Βασική αντιμετώπιση προβλημάτων

A. Κακή σύνδεση

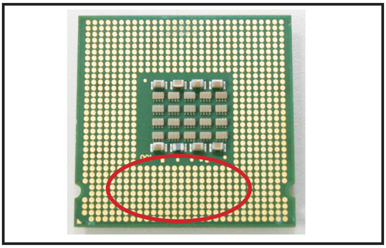
1. Βεβαιωθείτε ότι δεν υπάρχουν μολυντικά υλικά στις χρυσές επαφές ή στις ακίδες.
2. Χρησιμοποιήστε μια μπατονέτα ή μια γομαλάστιχα και τρίψτε απαλά τη χρυσή επαφή. Μην ξεχάσετε να απομακρύνετε τα ξύσματα.



Χρυσή επαφή κάρτας VGA



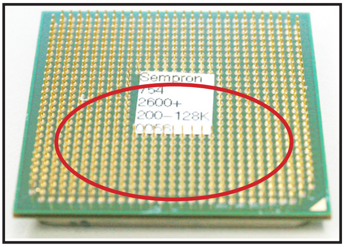
Χρυσή επαφή DIMM



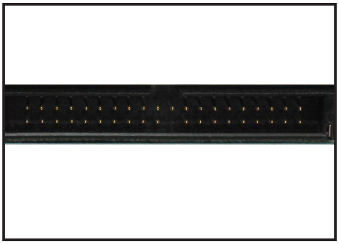
Σημεία χρυσής επαφής επεξεργαστή LGA775

Κρατήστε την κάρτα ή την CPU από τα άκρα και MHN αγγίζετε τη χρυσή επαφή. Ο στατικός ηλεκτρισμός θα προκαλέσει σοβαρή βλάβη στη συσκευή.

3. Βεβαιωθείτε ότι δεν υπάρχουν σπασμένες ή λυγισμένες ακίδες στις ακίδες σύνδεσης ή στις ακίδες της CPU. Σπασμένες και λυγισμένες ακίδες θα προκαλέσουν κακή λειτουργία του εξαρτήματος. Επικοινωνήστε με το μεταπωλητή για περαιτέρω υποστήριξη.



Χρυσές ακίδες της AMD CPU

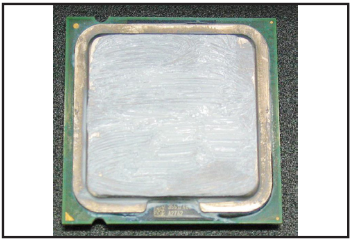


Ακίδες ακροδέκτη

Αν το σπάσιμο ή λύγισμα των ακίδων έχει προκληθεί μετά την αγορά, ο μεταπωλητής ενδέχεται να χρεώσει για την επισκευή. Μερικές φορές οι σπασμένες ή λυγισμένες ακίδες ΔΕΝ ΕΠΙΣΚΕΥΑΖΟΝΤΑΙ.

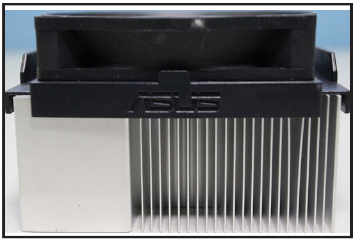
Β. Υπερθέρμανση της CPU

1. Καθαρίστε την επιφάνεια της CPU με ένα καθαρό πανί. Ρίξτε αρκετές σταγόνες της θερμικής πάστας στην εκτεθειμένη περιοχή της CPU με την οποία θα έρθει σε επαφή η ψήκτρα. Βεβαιωθείτε ότι την απλώνετε σε ένα λεπτό ομοιόμορφο στρώμα.

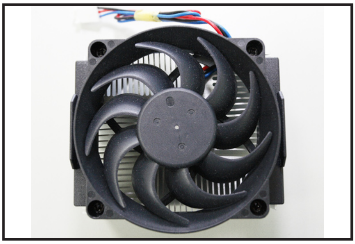


Επιφάνεια CPU

2. Βεβαιωθείτε ότι δεν υπάρχουν μολυντικά υλικά πάνω στην ψήκτρα και στον ανεμιστήρα.



Πλαϊνή όψη της ψήκτρας και του ανεμιστήρα



Άνω όψη της ψήκτρας και του ανεμιστήρα

3. Ακολουθήστε τις οδηγίες των κατασκευαστών της ψήκτρας και του ανεμιστήρα για να καθαρίσετε τα μολυντικά υλικά τα οποία θα επιβραδύνουν την περιστροφή του ανεμιστήρα.

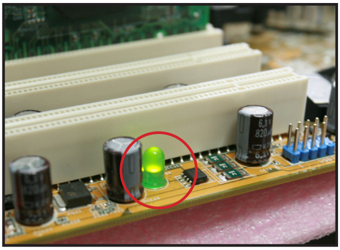
3.2 Άλλα συνηθισμένα προβλήματα

- Όταν αφαιρείτε συσκευές από το σύστημα, βεβαιωθείτε ότι έχετε αποσυνδέσει όλα τα καλώδια τροφοδοσίας.
- Όλα τα μηνύματα σφάλματος θα εμφανιστούν στην οθόνη κατά τη διάρκεια του αυτοδιαγνωστικού τεστ (POST).
- Αν ακουστούν ήχοι μπιπ από το BIOS, ανατρέξτε για λεπτομέρεις στην ενότητα 1.11.
- Ανατρέξτε στον πίνακα λίστας ελέγχου που ακολουθεί για περαιτέρω έλεγχο.

	Στοιχείο ελέγχου					
	Λυχνία LED Τροφοδοσίας	**Εμφάνιση οθόνης**	**Ψήκτρα και ανεμιστήρας**	**Ήχοι BIOS**	**Μηνύματα σφάλματος**	**Σελίδα αναφοράς**
Δεν υπάρχει τροφοδοσία	**Απενεργ. (Off)**	**Όχι**	**Διακοπή**	**Όχι**	**Μ/Δ**	**3-4**
Η οθόνη δεν εμφανίζεται	**Αναμμένη**	**Όχι**	**Διακοπή**	**Όχι**	**Μ/Δ**	**3-5**
	Αναμμένη	**Όχι**	**Λειτουργεί**	**Όχι**	**Μ/Δ**	**3-5**
	Αναμμένη	**Όχι**	**Λειτουργεί**	**Ναι**	**Μ/Δ**	**3-5**
Αδυναμία εισαγωγής στο λειτουργικό σύστημα (OS)	**Αναμμένη**	**Ναι**	**Λειτουργεί**	**Ναι**	**Ναι**	**3-5**
	Αναμμένη	**Ναι**	**Λειτουργεί**	**Όχι**	**Ναι**	**3-5**
	Αναμμένη	**Ναι**	**Λειτουργεί**	**Όχι**	**Όχι**	**3-5**

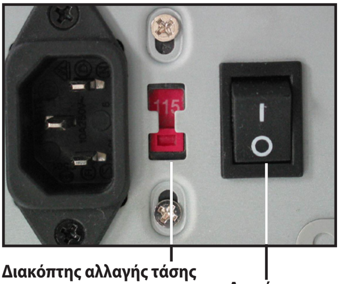
Αν το πρόβλημα επιλυθεί αλλά εμφανιστεί ένα νέο πρόβλημα, ανατρέξτε ξανά στη λίστα ελέγχου. Αν το πρόβλημα επιμένει, επικοινωνήστε με το μεταπωλητή ή με την ομάδα τεχνικής υποστήριξης της ASUS για περαιτέρω βοήθεια.

3.2.1 Δεν υπάρχει τροφοδοσία



Οι μητρικές κάρτες ASUS διαθέτουν λυχνία LED ένδειξης τροφοδοσίας σε κατάσταση αναμονής. Η λυχνία LED ανάβει για να υποδείξει ότι το σύστημα είναι σε κατάσταση ενεργοποίησης (ON). Αν η λυχνία LED παραμένει σβηστή, ακολουθήστε τις παρακάτω οδηγίες για να αποκαταστήσετε το πρόβλημα.

1. Βεβαιωθείτε ότι έχετε ρυθμίσει την τροφοδοσία στη σωστή τάση εισόδου AC για την περιοχή σας και ότι την έχετε ενεργοποιήσει.

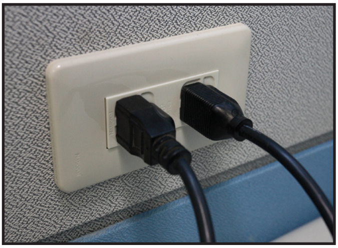


Διακόπτης αλλαγής τάσης εισόδου AC

Διακόπτης τροφοδοσίας "—": Ενεργ. (On) "O": Απενεργ. (Off)

- Πριν ρυθμίσετε την τάση εισόδου AC, βεβαιωθείτε ότι έχετε αποσυνδέσει το φις τροφοδοσίας. Σε αντίθετη περίπτωση θα προκληθεί σοβαρή βλάβη στη μονάδα του τροφοδοτικού.
- Αν δεν ρυθμίσετε το τροφοδοτικό στη σωστή τάση εισόδου AC θα προκληθεί σοβαρή βλάβη στο σύστημα.

2. Βεβαιωθείτε ότι έχετε συνδέσει το καλώδιο τροφοδοσίας στην πρίζα.
   - Συνδέστε το φις του καλωδίου ρεύματος σε μια πρίζα στον τοίχο. ΜΗΝ το συνδέετε σε επέκταση καλωδίου, μονάδα αδειάλειπτης τροφοδοσίας ρεύματος (UPS) ή άλλες συσκευές.
   - Ανταλλάξτε τα φις τροφοδοσίας του συστήματος και της οθόνης για να ελέγξετε αν η πρίζα λειτουργεί κανονικά.



3. Αν το πρόβλημα επιμένει, ίσως να πρέπει να επικοινωνήσετε με το μεταπωλητή για νέα μονάδα τροφοδοτικού. Αν η μονάδα τροφοδοτικού λειτουργεί, επικοινωνήστε με το μεταπωλητή της μητρικής κάρτας ASUS για σέρβις της κάρτας στα πλαίσια της εγγύησης.

3.2.2 Σφάλμα κατά την εκκίνηση. Η οθόνη δεν εμφανίζεται

Τις περισσότερες φορές το σφάλμα κατά την εκκίνηση και η μη εμφάνιση της οθόνης οφείλονται σε ελάττωμα της συσκευής ή κακή εγκατάσταση. Ακολουθήστε τις παρακάτω οδηγίες για να αποκαταστήσετε το πρόβλημα.

1. Βεβαιωθείτε ότι όλα τα καλώδια τροφοδοσίας είναι συνδεδεμένα, συμπεριλαμβανομένων των καλωδίων του συστήματος και της οθόνης.
2. Ελέγξτε αν το πρόβλημα προέρχεται από συσκευές επέκτασης.
   - Αφαιρέστε όλες τις κάρτες επέκτασης και τις συσκευές. Για την επανεκκίνηση του συστήματος χρησιμοποιήστε μόνο μητρική κάρτα, οθόνη, κάρτα VGA, στοιχεία μνήμης, μονάδα τροφοδοτικού, ψήκτρα και ανεμιστήρα, πληκτρολόγιο και ποντίκι.
   - Αν το σύστημα λειτουργεί κανονικά, το πρόβλημα προκλήθηκε από τις συσκευές επέκτασης. Εγκαταστήστε ξανά στο σύστημα τις συσκευές επέκτασης που αφαιρέσατε μία προς μία για να προσδιορίσετε την ελαττωματική συσκευή.
3. Ελέγξτε αν το πρόβλημα προέρχεται από τις βασικές συσκευές του συστήματος.
   - Αν έχετε εφεδρικές συσκευές, μπορείτε να αντικαταστήσετε τις συσκευές μία προς μία ώστε να προσδιορίσετε την ελαττωματική συσκευή με την ακόλουθη σειρά "στοιχείο μνήμης, CPU, μητρική κάρτα, μονάδα σκληρού/οπτικού δίσκου, πληκτρολόγιο/ποντίκι."

Όταν προσδιορίσετε την ελαττωματική συσκευή επικοινωνήστε με το μεταπωλητή για σέρβις.

3.2.3 Αδυναμία εισαγωγής στο λειτουργικό σύστημα

1. Αν το πρόβλημα εμφανιστεί αφού προσθέσατε μια συσκευή υλικού, αφαιρέστε τη νέα συσκευή υλικού και κάντε επανεκκίνηση του συστήματος. Αν το σύστημα λειτουργεί κανονικά χωρίς αυτή τη μονάδα υλικού, η μονάδα αυτή ενδέχεται να είναι ελαττωματική ή ασύμβατη με το σύστημα. Επικοινωνήστε με το μεταπωλητή της συσκευής για βοήθεια.
2. Αν το πρόβλημα εμφανιστεί αφού εγκαταστήσετε ένα λογισμικό ή ένα πρόγραμμα οδήγησης, ακολουθήστε τις παρακάτω οδηγίες για να αποκαταστήσετε το πρόβλημα.
   α. Εισαχθείτε στο λειτουργικό σύστημα σε ασφαλή λειτουργία και αφαιρέστε το λογισμικό ή το πρόγραμμα οδήγησης.
   β. Επικοινωνήστε με την εταιρία του λειτουργικού συστήματος για υποστήριξη.
   γ. Αν οι προηγούμενες οδηγίες δεν σας βοηθήσουν να αποκαταστήσετε το πρόβλημα, μπορεί να χρειαστεί να διαμορφώσετε ξανά τη μονάδα σκληρού δίσκου και να εγκαταστήσετε ένα νέο λειτουργικό σύστημα.
3. Αν το πρόβλημα εμφανιστεί αφού αλλάξετε τις ρυθμίσεις του BIOS, κάντε επανεκκίνηση και εισαχθείτε στο BIOS για να φορτώσετε τις προεπιλεγμένες ρυθμίσεις εγκατάστασης. Ανατρέξτε στον οδηγό χρήστη της μητρικής κάρτας για λεπτομέρειες.
4. Αν το πρόβλημα προέρχεται από ιό ή από ένα κατεστραμμένο αρχείο ακολουθήστε τις παρακάτω οδηγίες για να αποκαταστήσετε το πρόβλημα.

α. Εισαχθείτε στο λειτουργικό σύστημα σε ασφαλή λειτουργία και εκτελέστε πλήρη ανίχνευση ιών στο σύστημα με ένα λογισμικό προστασίας από ιούς.

β. Επικοινωνήστε με την εταιρία του λειτουργικού συστήματος για υποστήριξη.

γ. Αν οι προηγούμενες οδηγίες δεν σας βοηθήσουν να αποκαταστήσετε το πρόβλημα, μπορεί να χρειαστεί να διαμορφώσετε ξανά τη μονάδα σκληρού δίσκου και να εγκαταστήσετε ένα νέο λειτουργικό σύστημα.

3.2.4 Συχνές ερωτήσεις (FAQs)

ΕΡ1: Η μνήμη που αναφέρεται στη δοκιμή POST είναι διαφορετική από αυτήν που είναι εγκατεστημένη.

ΑΠ1: Η διαφορά μπορεί να προέρχεται από ελαττωματικά στοιχεία μνήμης ή εσφαλμένη εγκατάσταση DIMM. Βεβαιωθείτε ότι οι DIMMs είναι σε καλή κατάσταση και ότι οι DIMMs έχουν εγκατασταθεί σωστά. Ανατρέξτε στον οδηγό χρήστη μητρικής κάρτας για λεπτομέρειες. Αν έχετε εγκαταστήσει μνήμη 4.0 GB και αναφέρονται 3.X GB, αυτό είναι φυσιολογικό.

ΕΡ2: Το σύστημα δεν ανιχνεύει τη μονάδα δισκέττας, αλλά η μονάδα δισκέττας είναι αναμμένη.

ΑΠ2: Τα καλώδια της μονάδας δισκέττας δεν είναι σωστά εγκατεστημένα. Βεβαιωθείτε ότι η κόκκινη ρίγα στο καλώδιο (άκρο ακίδας1) ταιριάζει με την ακίδα1 στην μονάδα δισκέττας.

ΕΡ3: Αδυναμία εισαγωγής στο λειτουργικό σύστημα μετά την εισαγωγή δίσκου USB flash ή εξωτερικού σκληρού δίσκου.

ΑΠ3: Όταν το σύστημα εντοπίσει δίσκο USB flash ή εξωτερικό δίσκο διεπαφής USB μπορεί να αλλάξει την προτεραιότητα συσκευής εκκίνησης. Αφαιρέστε τις συσκευές USB και κάντε επανεκκίνηση του συστήματος.

ΕΡ4: Κατά την εγκατάσταση των Windows XP, δεν ανιχνεύει τις μονάδες σκληρού δίσκου που είναι εγκατεστημένες στον ελεγκτή RAID.

ΑΠ4: Τα Windows XP δεν περιλαμβάνουν το πρόγραμμα οδήγησης του ελεγκτή RAID επομένως οι μονάδες σκληρών δίσκων δεν εντοπίζονται. Αντιγράψτε το πρόγραμμα οδήγησης του ελεγκτή RAID σε μια δισκέττα και όταν εκκινήσετε το σύστημα με το δίσκο Windows XP, πατήστε <F6> για να διαβάσετε το πρόγραμμα οδήγησης από τη δισκέττα. Ανατρέξτε στον οδηγό χρήστη μητρικής κάρτας για λεπτομέρειες.

Κεφάλαιο 4: Συμβουλές για τη φροντίδα του υπολογιστή

4.1 Σωστή φροντίδα του Η/Υ

Ο προσωπικός σας υπολογιστής είναι όπως οι άλλες οικιακές σας συσκευές. Διατηρείτε τον υπολογιστή σας μακριά από υγρασία, το άμεσο ηλιακό φως και πηγές στατικού ηλεκτρισμού. Δεν πρέπει να μετακινείτε τον υπολογιστή όταν είναι ενεργοποιημένος ή σε περίπτωση βλάβης. Η σκόνη στο εσωτερικό θα επηρεάσει τη λειτουργική μονάδα δίσκου και θα συνεισφέρει στη δημιουργία προβλήματος υπερθέρμανσης που μπορεί να προκαλέσει σφάλμα ή βλάβη σε εξαρτήματα.

4.2 Βασικές γνώσεις

1. Τοποθετείτε στον υπολογιστή κάλυμμα προστασίας από τη σκόνη όταν δεν τον χρησιμοποιείτε.
2. Όταν χρησιμοποιείτε τον υπολογιστή, μην τοποθετείτε τίποτα πάνω στην οθόνη που θα μπορούσε να μπλοκάρει τις οπές εξαερισμού. Η υπερβολική θερμότητα θα προκαλέσει κακή λειτουργία της οθόνης.
3. Μην τοποθετείτε τον υπολογιστή κοντά στον τοίχο και αφήνετε πάντα χώρο για αποβολή της θερμότητας. Η υπερθέρμανση θα προκαλέσει σφάλμα του συστήματος.
4. Τοποθετήστε τον υπολογιστή πάνω σε μια σταθερή επιφάνεια.
5. Διατηρείτε τον υπολογιστή μακριά από περιοχές με υπερβολική θερμοκρασία. Το εύρος θερμοκρασίας 5°C έως 30°C είναι η κατάλληλη θερμοκρασία περιβάλλοντος. Χρησιμοποιήστε κλιματιστικό ή ηλεκτρικό ανεμιστήρα για καλύτερη αποβολή της θερμότητας.
6. Τοποθετήστε τακτικά τα καλώδια τύπου κορδέλλας για καλή κυκλοφορία του αέρα.

4.3 Γνώση χρήσης

1. Θέτετε σε λειτουργία και τερματίζετε τη λειτουργία του υπολογιστή τακτικά. Αν ο υπολογιστής πρέπει να παραμείνει ενεργοποιημένος για μεγάλο χρονικό διάστημα, χρησιμοποιήστε έναν ανεμιστήρα συστήματος/CPU και μονάδα τροφοδοτικού υψηλής τάσης.
2. Μια ξαφνική διακοπή ρεύματος θα προκαλέσει βλάβη στη μονάδα σκληρού δίσκου. Όταν η τροφοδοσία ρεύματος είναι ασταθής, συνιστάται να προσθέτετε μονάδα αδιάλειπτης παροχής ρεύματος στον υπολογιστή.
3. Επαναδιατάξτε τα αρχεία δεδομένων, εκτελέστε ανίχνευση ιών και ανανεώστε τους κωδικούς ιών και κάντε τακτικά ανασυγκρότηση των δίσκων.

4. Καθαρίζετε τακτικά τον υπολογιστή. (Αποσυνδέετε όλα τα καλώδια τροφοδοσίας πριν από τον καθαρισμό)
    - Απεγκαταστήστε τη μητρική κάρτα και τις μονάδες σκληρού/οπτικού δίσκου, καθαρίστε τα με πεπιεσμένο αέρα ή με μια απαλή βούρτσα.
    - Αφαιρέστε τη σκόνη και υπολείμματα τριχών από τη μονάδα τροφοδοτικού με αντιστατικό υπό πίεση.

4.4 Συμβουλές

1. Αν δεν πρόκειται να χρησιμοποιήσετε τον υπολογιστή για μεγάλο χρονικό διάστημα, τοποθετήστε αφυγραντικές ουσίες στο περίβλημα για το προστατεύσετε σε περιβάλλον με υγρασία.
2. Σε μερικές περιοχές που είναι θερμές και με υγρασία πρέπει να ενεργοποιείτε τον υπολογιστή σας κάθε δεύτερη εβδομάδα. Αυτό θα σας βοηθήσει να αποφύγετε βλάβη που οφείλεται στην υγρασία.

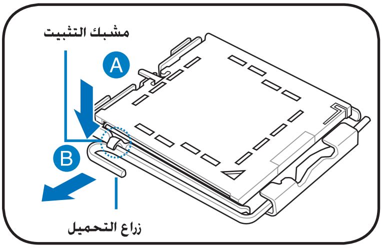
الفصل الأول: التشغيل السريع

١-١ تركيب وحدة المعالجة المركزية

١-١-١ مقبس Intel® LGA775

١- حدد موقع مقبس وحدة المعالجة المركزية على اللوحة الأم.

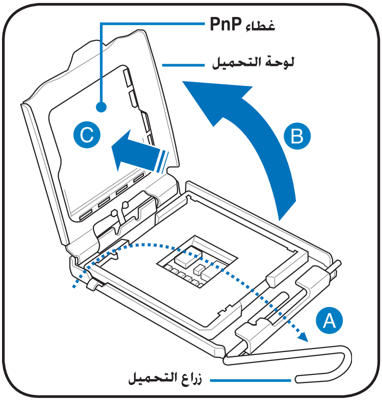
٢. اضغط بإصبعك على زراع التحميل كما هو مشار إليه بالرقم (A). ثم حركه إلى اليسار كما هو مشار إليه بالرقم (B) حتى يتم تحريرها من مشبك التثبيت.


مشبك التثبيت
A
B
زراع التحميل

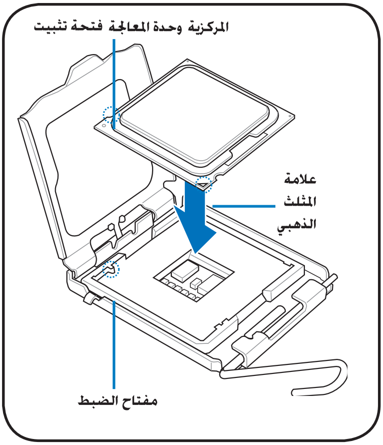
للمحافظة على مسامير القابس من التلف. لا تنزع غطاء PnP إلا عندما تقوم بتركيب وحدة معالجة مركزية.

٣. ارفع زراع التحميل في اتجاه السهم حتى تصل إلى زاوية قدرها ١٣٥º.

٤. ارفع لوحة التحمل بإصبع الإبهام و السبابة حتى زاوية ١٠٠ درجة (٤A)، ثم ادفع غطاء PnP من فتحة لوحة التحميل لإزالة (٤B).

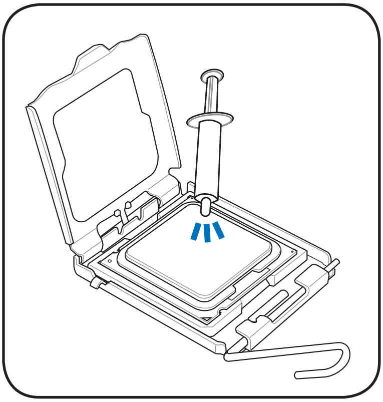

غطاء PnP
لوحة التحميل
C
B
A
زراع التحميل

٥. ضع وحدة المعالجة المركزية في مكانها على القابس، مع التأكد من أن المثلث الذهبي في الجانب الأيسر السفلي من القابس. ثم قم بتثبيت مفتاح ضبط القابس في فتحة وحدة المعالجة المركزية بإحكام.



ينبغي مراعاة أن وحدة المعالجة المركزية لا تثبت في مكانها بإحكام إلا في اتجاه واحد صحيح.
ومن ثم فلا يجب دفع وحدة المعالجة المركزية بقوة وذلك منعاً لثني أطراف التوصيل الموجودة بالقابس وإتلاف وحدة المعالجة المركزية.

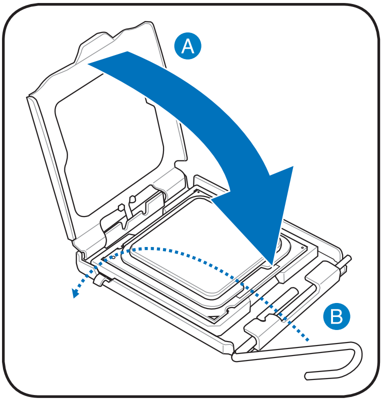
٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساو على طبقة رفيعة.



يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

٧. أغلق لوحة التحميل (A)، ثم ادفع زراع التحميل (B) حتى يثبت بإحكام في فتحة التثبيت.

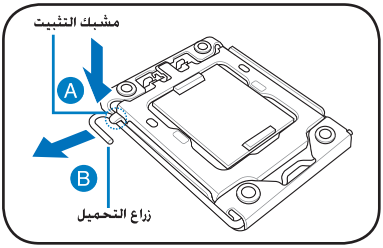


١,١,٢ قابس Intel® LGA1366

١. قم بتحديد مكان قابس وحدة المعالجة المركزية في اللوحة الأم.

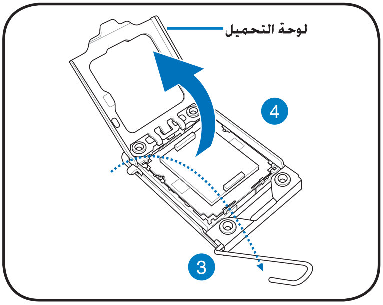
٢. اضغط بإصبعك على زراع التحميل كما هو مشار إليه بالرقم (A). ثم حركه إلى اليسار كما هو مشار إليه بالرقم (B) حتى يتم تحريرها من مشبك التثبيت.

للمحافظة على مسامير القابس من التلف.
لا تنزع غطاء PnP إلا عندما تقوم بتركيب
وحدة معالجة مركزية.

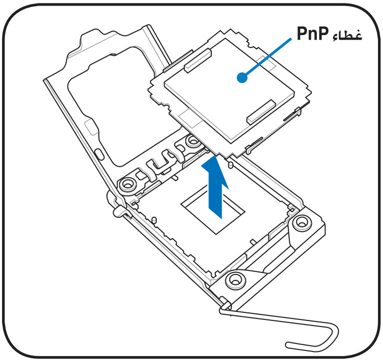


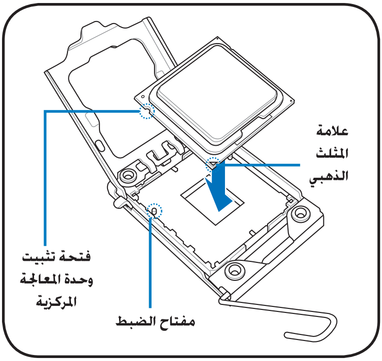
٣. ارفع زراع التحميل في اتجاه السهم حتى تصل إلى زاوية قدرها ١٣٥º.

٤. ارفع لوحة التحميل بأصابعك بزاوية قدرها ١٠٠º.



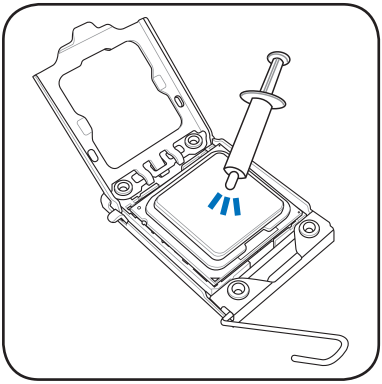
٥. قم بإزالة غطاء PnP من قابس وحدة المعالجة المركزية.





٧. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.

ينبغي مراعاة أن وحدة المعالجة المركزية لا تثبت في مكانها بإحكام إلا في اتجاه واحد صحيح. ومن ثم فلا يجب دفع وحدة المعالجة المركزية بقوة وذلك منعاً لثني أطراف التوصيل الموجودة بالقابس وإتلاف وحدة المعالجة المركزية.

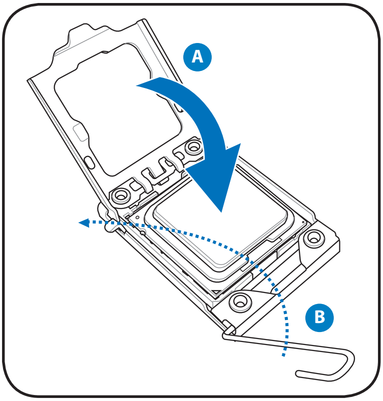


٦. ضع وحدة المعالجة المركزية في مكانها على القابس، مع التأكد من أن المثلث الذهبي في الجانب الأيسر السفلي من القابس، ثم قم بتثبيت مفتاح ضبط القابس في فتحة وحدة المعالجة المركزية بإحكام.

يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

٨. أغلق لوحة التحميل (A)، ثم ادفع زراع التحميل (B) حتى يثبت بإحكام في فتحة التثبيت.



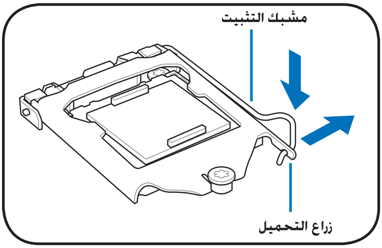
١,١,٣ مقبس Intel® LGA1156

معالج LGA1155 CPU غير متوافق مع مقبس LGA1156. لا تقم بتركيب معالج LGA1155 CPU على مقبس LGA1156.

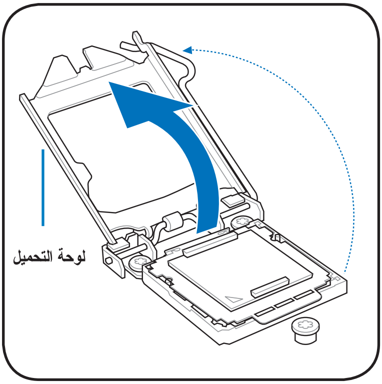
١. حدد مقبس وحدة المعالج على اللوحة الأم.

٢. اضغط على ذراع التحميل بإبهامك (أ)، ثم حركه تجاه اليمين (ب) حتى يتم تحريره من لسان الحفاظ.

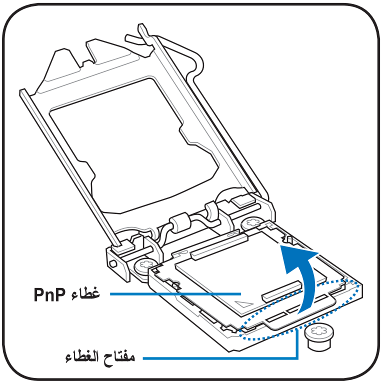
لمنع تعرض مسامير المقبس من التعرض للتلف، لا تقم بإزالة غطاء PnP إلا إذا كنت تركب وحدة معالجة مركزية.


مشبك التثبيت
زراع التحميل

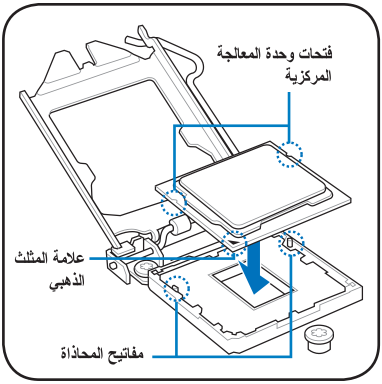
٣. ارفع ذراع التحميل في اتجاه السهم حتى يتم رفع لوحة التحميل بالكامل.


لوحة التحميل

٤. قم بفك غطاء PnP من مقبس وحدة المعالجة المركزية (CPU) برفع اللسان فقط.

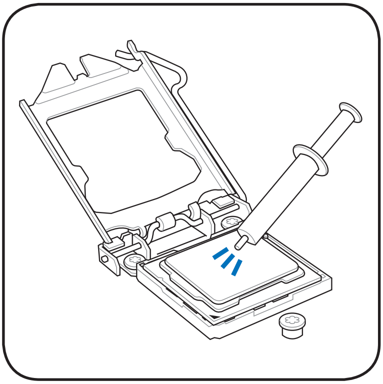

غطاء PnP
مفتاح الغطاء

٥. ضع وحدة المعالجة المركزية فوق المقبس، مع التأكد أن المثلث الذهبي في الركن الأسفل – السفلي من المقبس، ثم ركب مفاتيح محاذاة المقبس في فتحات وحدة المعالجة المركزية.



يتم تركيب وحدة المعالجة المركزية في اتجاه صحيح واحدة. لا تدفع وحدة المعالجة المركزية في المقبس لمنع ثني الموصلات في المقبس وتعرض وحدة المعالجة المركزية للتلف.

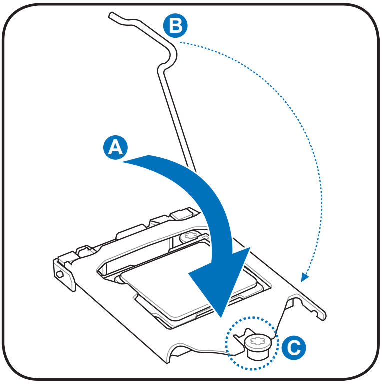
٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساو على طبقة رفيعة.



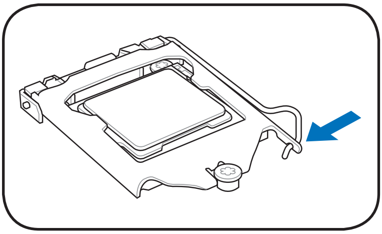
يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

٧. أغلق لوحة التحميل (أ)،ثم ادفع ذراع التحميل (ب) مع التأكد من أن الحافة الأمامية من لوحة التحميل ينزلق تحت قفل الحفاظ (ج).



٨. ركب ذراع التحميل تحت لسان الحفاظ.

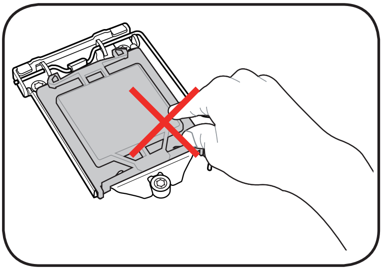


١,١,٤ مقبس LGA1155 Intel® (غطاء PnP على لوحة التحميل)

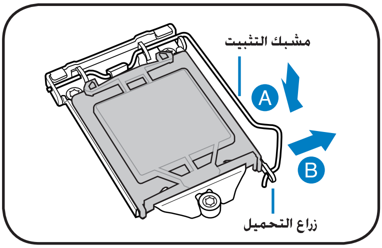
معالج LGA1156 CPU غير متوافق مع مقبس LGA1155. لا تقم بتركيب معالج LGA1156 CPU على مقبس LGA1155.

١. حدد مقبس وحدة المعالج على اللوحة الأم.

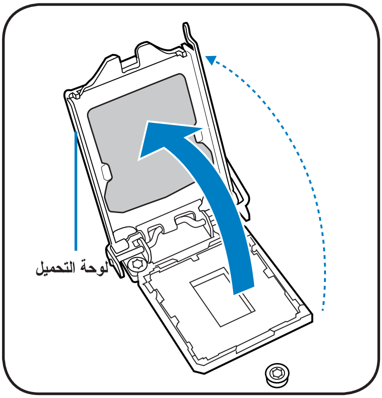
٢. تأكد من إزالة غطاء PnP من مقبس CPU قبل تثبيت CPU.



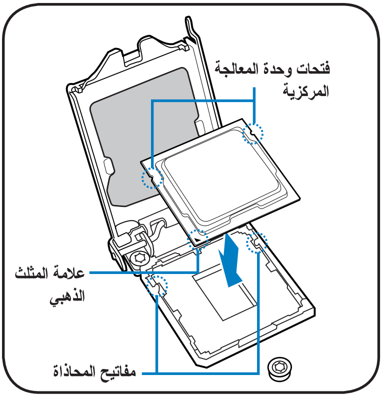
٣. اضغط على ذراع التحميل بإبهامك (أ)، ثم حركه تجاه اليمين (ب) حتى يتم تحريره من لسان الحفاظ.



٤. ارفع ذراع التحميل في اتجاه السهم حتى يتم رفع لوحة التحميل بالكامل.

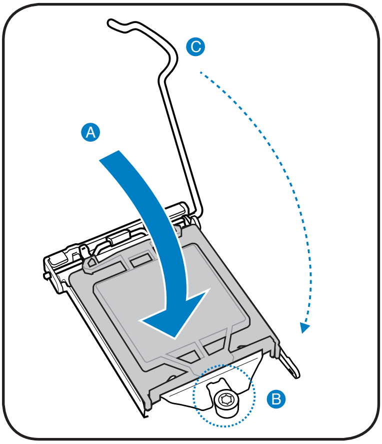


٥. ضع وحدة المعالجة المركزية فوق المقبس، مع التأكد أن المثلث الذهبي في الركن الأسفل – السفلي من المقبس، ثم ركب مفاتيح محاذاة المقبس في فتحات وحدة المعالجة المركزية.

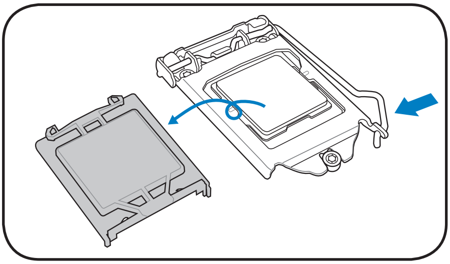

فتحات وحدة المعالجة المركزية
علامة المثلث الذهبي
مفاتيح المحاذاة

يتم تركيب وحدة المعالجة المركزية في اتجاه صحيح واحدة. لا تدفع وحدة المعالجة المركزية في المقبس لمنع ثني الموصلات في المقبس وتعرض وحدة المعالجة المركزية للتلف.

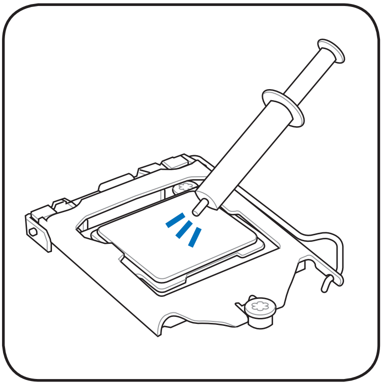
٦. أغلق لوحة التحميل (أ)، من التأكد أن الحافة الأمامية من لوحة التحميل تتحرك أسفل قفل الاحتجاز (ب). ثم ادفع ذراع التحميل لأسفل (ج).



٧. أدخل غطاء التحميل أسفل لسان الاحتجاز لإزالة غطاء PnP من مقبس CPU.



٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.



يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

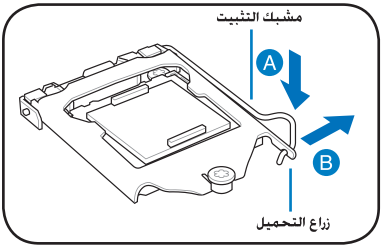
إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

١,١,٥ مقبس Intel® LGA1155 (غطاء PnP أسفل لوحة التحميل)

معالج CPU LGA1156 غير متوافق مع مقبس LGA1155. لا تقم بتركيب معالج CPU LGA1156 على مقبس LGA1155.

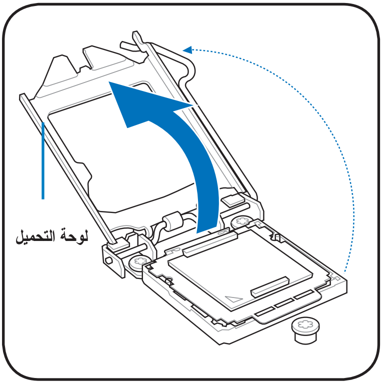
١. حدد مقبس وحدة المعالج على اللوحة الأم.

٢. اضغط على ذراع التحميل بإبهامك (أ)، ثم حركه تجاه اليمين (ب) حتى يتم تحريره من لسان الحفاظ.

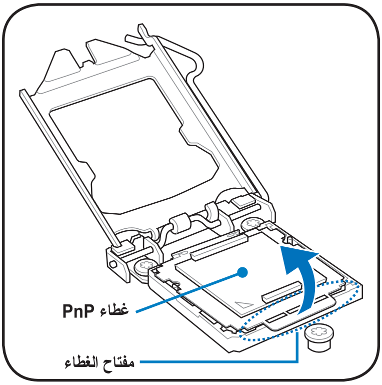

مشبك التثبيت
A
B
زراع التحميل

لمنع تعرض مسامير المقبس من التعرض للتلف، لا تقم بإزالة غطاء PnP إلا إذا كنت تركب وحدة معالجة مركزية.

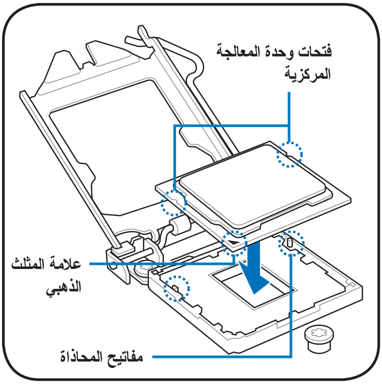
٣. ارفع ذراع التحميل في اتجاه السهم حتى يتم رفع لوحة التحميل بالكامل.


لوحة التحميل

٤. قم بفك غطاء PnP من مقبس وحدة المعالجة المركزية (CPU) برفع اللسان فقط.

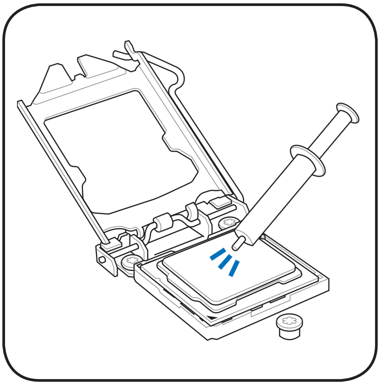

غطاء PnP
مفتاح الغطاء

٥. ضع وحدة المعالجة المركزية فوق المقبس، مع التأكد أن المثلث الذهبي في الركن الأسفل – السفلي من المقبس، ثم ركب مفاتيح محاذاة المقبس في فتحات وحدة المعالجة المركزية.



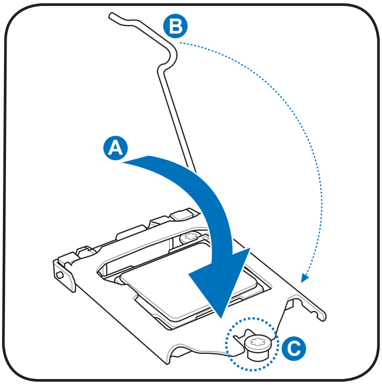
يتم تركيب وحدة المعالجة المركزية في اتجاه صحيح واحدة. لا تدفع وحدة المعالجة المركزية في المقبس لمنع ثني الموصلات في المقبس وتعرض وحدة المعالجة المركزية للتلف.

٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.

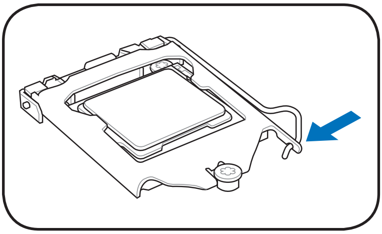


يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.



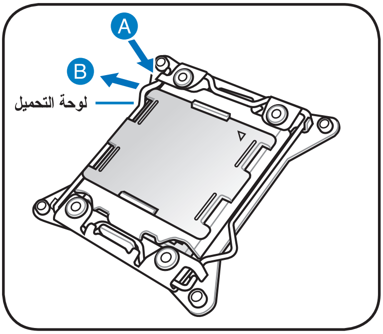
٧. أغلق لوحة التحميل (أ)، ثم ادفع ذراع التحميل (ب) مع التأكد من أن الحافة الأمامية من لوحة التحميل ينزلق تحت قفل الحفاظ (ج).



٨. ركب ذراع التحميل تحت لسان الحفاظ.

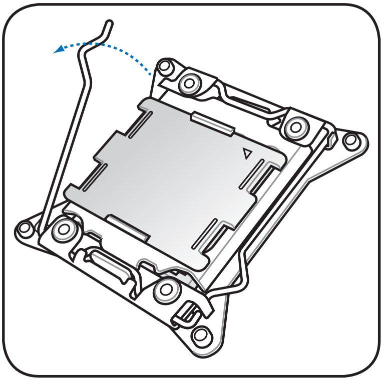
١,١,٦ قابس Intel® LGA 2011

١. قم بتحديد مكان قابس وحدة المعالجة المركزية في اللوحة الأم.

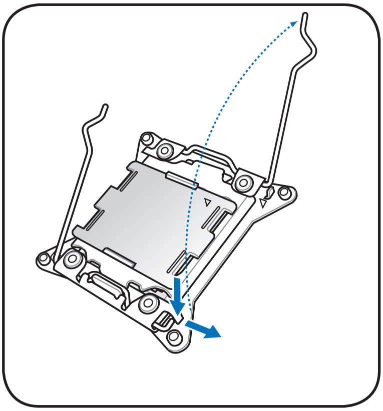


٢. اضغط بإصبعك على زراع التحميل كما هو مشار إليه بالرقم (A)، ثم حركه إلى اليسار كما هو مشار إليه بالرقم (B) حتى يتم تحريرها من مشبك التثبيت.

للمحافظة على مسامير القابس من التلف. لا تنزع غطاء PnP إلا عندما تقوم بتركيب وحدة معالجة مركزية.

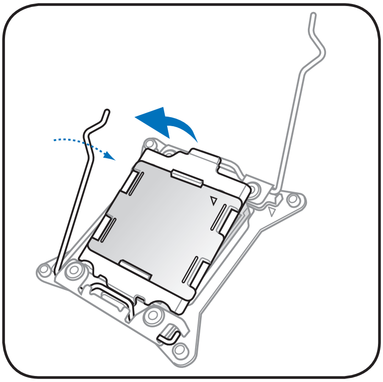


٣. ارفع ذراع التحميل برفق في اتجاه السهم.

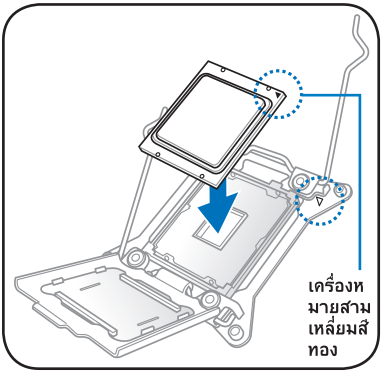


٣. أغلق لوحة التحميل (أ)، ثم ادفع ذراع التحميل (ب) مع التأكد من أن الحافة الأمامية من لوحة التحميل ينزلق تحت قفل الحفاظ (ج).
ارفع ذراع التحميل برفق في اتجاه السهم.

٥. ادفع ذراع تحميل الرفع (A) لرفع لوحة الرفع (B).

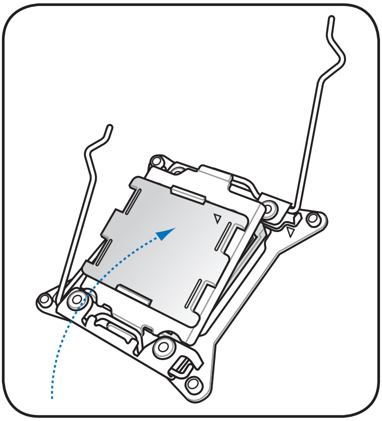


٦. ضع وحدة المعالجة المركزية (CPU) فوق المقبس، مع التأكد من وجود علامة المثلث على الركن العلوي الأيمن من المقبس.

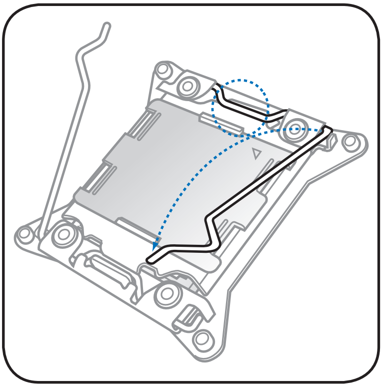


ينبغي مراعاة أن وحدة المعالجة المركزية لا تثبت في مكانها بإحكام إلا في اتجاه واحد صحيح. ومن ثم فلا يجب دفع وحدة المعالجة المركزية بقوة وذلك منعاً لثني أطراف التوصيل الموجودة بالقابس وإتلاف وحدة المعالجة المركزية.

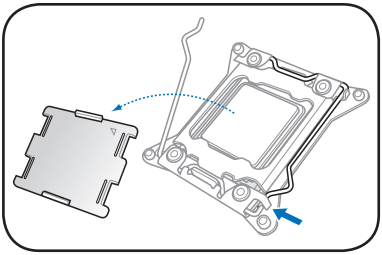
٧. أغلق لوحة التحميل



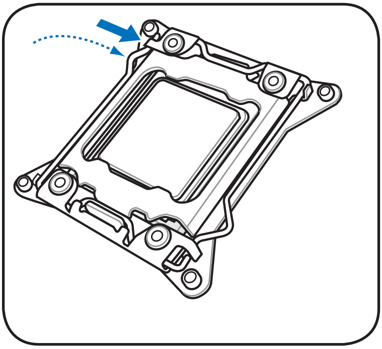
٨. اضغط لأسفل على ذراع التحميل الأيمن (A)، مع التأكد من ثبات حافة لوحة التحميل بواسطة الذراع (B).

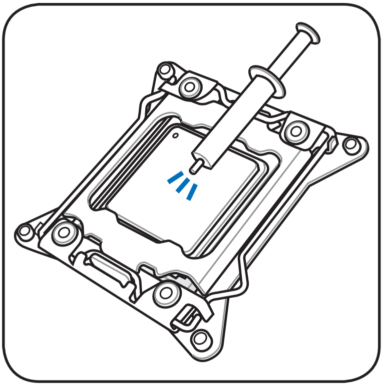


٩. أدخل ذراع التحميل الأيمن أسفل لسان الاحتجاز. قم بفك الغطاء PnP من مقبس وحدة المعالجة المركزية (CPU).



١٠. اضغط لأسفل على ذراع التحميل الأيسر (A)، ثم أدخل الذراع أسفل لسان الاحتجاز (B).

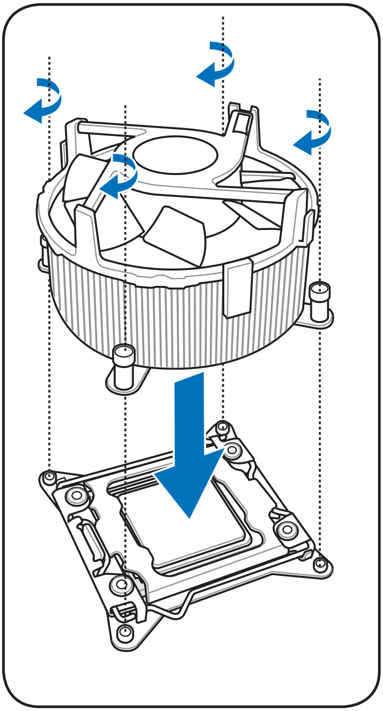




٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.

يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

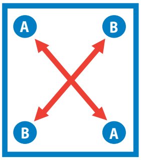
إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.



١٢. ضع وحدة التبريد في أعلى وحدة CPU المثبتة، مع ضمان أن الأربعة مثبتات تتوافق مع الفتحات في مقبس CPU.

١٣. لف كل برغي من البراغي الأربعة باستخدام مفك Philips (مستعرض) بشكل كاف لإرفاق وحدة التبريد بمقبس CPU. عند إرفاق الأربعة براغي، اربطها واحد تلو الآخر لإكمال تأمين وحدة التبريد.

اربط براغي وحدة التبريد الأربعة بتسلسل قطري.

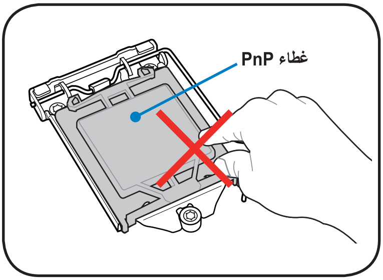


١,١,٧ مقبس Intel® LGA1150 (غطاء PnP على لوحة التحميل)

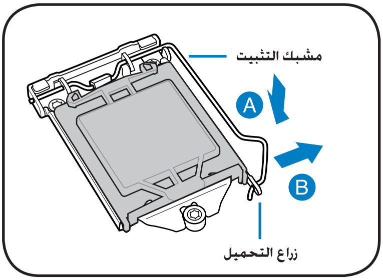
تأكد من تثبيت CPU الصحيح المخصص لمقبس LGA1150 فقط. لا تقم بتثبيت CPU مخصص لمقبسي LGA1155 و LGA1156 على مقبس LGA1150.

١. حدد مقبس وحدة المعالج على اللوحة الأم.

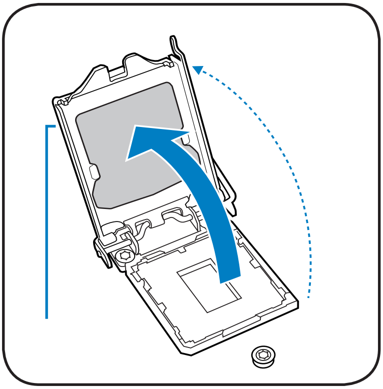
لا تنقل غطاء PnP من مقبس CPU. فقد يؤدي ذلك إلى ثني دبابيس المقبس. راجع الرسم التوضيحي بالأسفل لمعرفة مكان غطاء PnP.



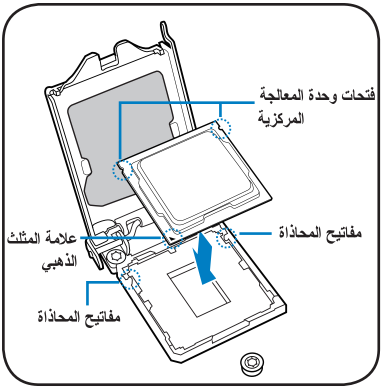
٢. اضغط على ذراع التحميل بإبهامك (أ)، ثم حركه تجاه اليمين (ب) حتى يتم تحريره من لسان الحفاظ.



٣. ارفع ذراع التحميل في اتجاه السهم حتى يتم رفع لوحة التحميل بالكامل.



٤. ضع الـ CPU على المقبس، وتأكد من أن علامة
المثلث الذهبي موجودة على الركن الأيسر السفلي
بضبط أسنان من المقبس، ثم قم CPU مع
مفاتيح المحاذاة الخاصة بالمقبس.


فتحات وحدة المعالجة المركزية
مفاتيح المحاذاة
علامة المثلث الذهبي
مفاتيح المحاذاة

يتم تركيب وحدة المعالجة المركزية في اتجاه صحيح واحدة. لا تدفع وحدة المعالجة المركزية في المقبس لمنع ثني الموصلات في المقبس وتعرض وحدة المعالجة المركزية للتلف.

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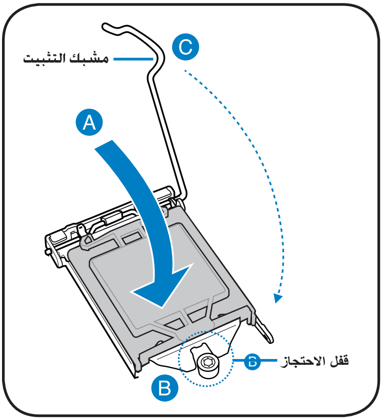
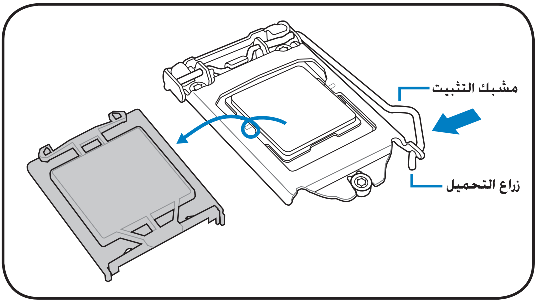
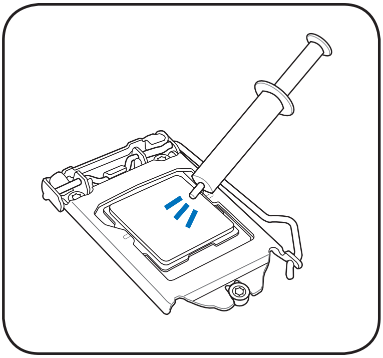
٥. أغلق لوحة التحميل (أ)، من التأكد أن الحافة الأمامية من لوحة التحميل تتحرك أسفل قفل الاحتجاز (ب). ثم ادفع ذراع التحميل لأسفل (ج).


مشبك التثبيت
C
A
قفل الاحتجاز
B
B

٦. أدخل غطاء التحميل أسفل لسان الاحتجاز لإزالة غطاء PnP من مقبس CPU.


مشبك التثبيت
زراع التحميل

٧. ضع مادة واجهة حرارية على المنطقة المكشوفة
في وحدة المعالجة المركزية والتي تلامسها
منطقة امتصاص الحرارة، مع التأكد نشرها
بشكل متساوٍ على طبقة رفيعة.



يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

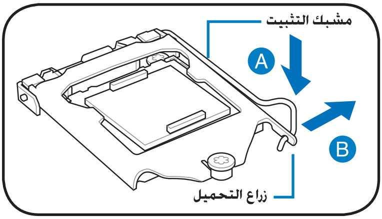
إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

١،١،٨ مقبس LGA 1150 ®Intel (غطاء PnP أسفل لوحة التحميل)

تأكد من تثبيت CPU الصحيح المخصص لمقبس LGA1150 فقط. لا تقم بتثبيت CPU مخصص لمقبسي LGA1155 و LGA1156 على مقبس LGA1150.

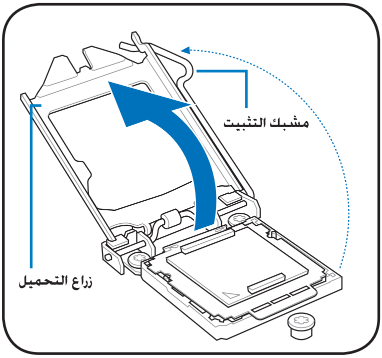
١. حدد مقبس وحدة المعالج على اللوحة الأم.

٢. اضغط على ذراع التحميل بإبهامك (أ)، ثم حركه تجاه اليمين (ب) حتى يتم تحريره من لسان الحفاظ.

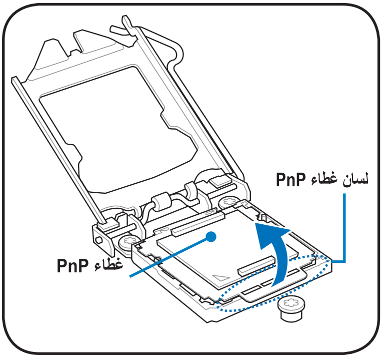

مشبك التثبيت
A
B
زراع التحميل

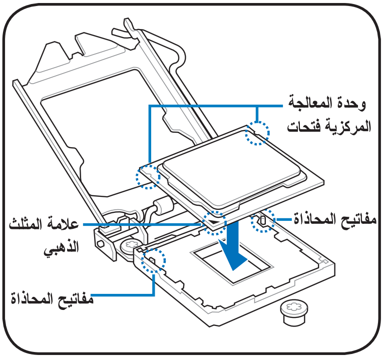
لا تقم بإزالة غطاء PnP من مقبس CPU، حيث أن ذلك قد يؤدي إلى ثني دبابيس المقبس.

٣. ارفع ذراع التحميل في اتجاه السهم حتى يتم رفع لوحة التحميل بالكامل.


مشبك التثبيت
زراع التحميل

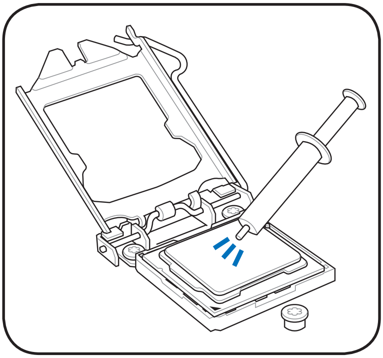
٤. قم بفك غطاء PnP من مقبس وحدة المعالجة المركزية (CPU) برفع اللسان فقط.


لسان غطاء PnP
غطاء PnP


وحدة المعالجة
المركزية فتحات
علامة المثلث
الذهبي
مفاتيح المحاذاة
مفاتيح المحاذاة

٥. ضع الـ CPU على المقبس، وتأكد من أن علامة المثلث الذهبي موجودة على الركن الأيسر السفلي من المقبس، ثم قم بضبط أسنان CPU مع مفاتيح المحاذاة الخاصة بالمقبس.

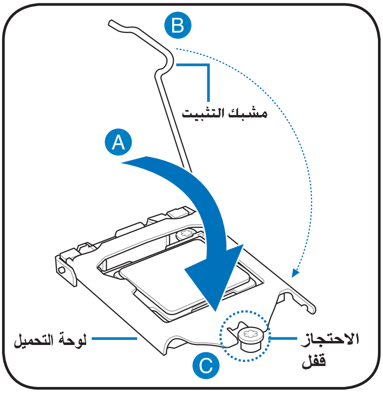
يتم تركيب وحدة المعالجة المركزية في اتجاه صحيح واحدة. لا تدفع وحدة المعالجة المركزية في المقبس لمنع ثني الموصلات في المقبس وتعرض وحدة المعالجة المركزية للتلف.



٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.

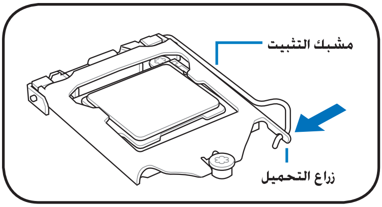
يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها واستشارة الطبيب على الفور.


B
مشبك التثبيت
A
لوحة التحميل
الاحتجاز
قفل
C

٧. أغلق لوحة التحميل (أ)،ثم ادفع ذراع التحميل (ب) مع التأكد من أن الحافة الأمامية من لوحة التحميل ينزلق تحت قفل الحفاظ (ج).

٨. ركب ذراع التحميل تحت لسان الحفاظ.

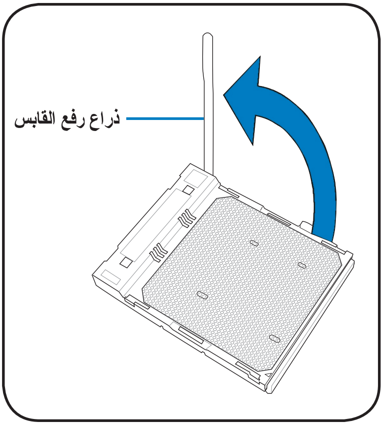

مشبك التثبيت
ذراع التحميل

١,١,٩ قابس AMD AM2/AM2+/AM3

- تتوافق مقابس AMD AM2 و+AM2 مع معالجات AMD AM2 و+AM2 وAM3.
- يتوافق منفذ AMD AM3 مع معالجات AMD AM3. لا تقم بتركيب معالج AM2 / +AMD AM2 في منفذ AM3. تدعم طرازات معينة من لوحات AM3 الأم معالجات +AM3 من خلال ترقية نظام الدخل / الخرج الأساسي (BIOS). راجع موقع دعم ASUS للاطلاع على التفاصيل.

١. قم بتحديد مكان قابس وحدة المعالجة المركزية في اللوحة الأم.

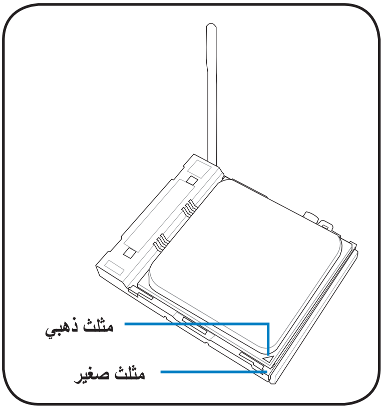
٢. اضغط على جانبي زراع التحريك للفتح القابس، ثم ارفعه بزاوية قدرها ٩٠º.

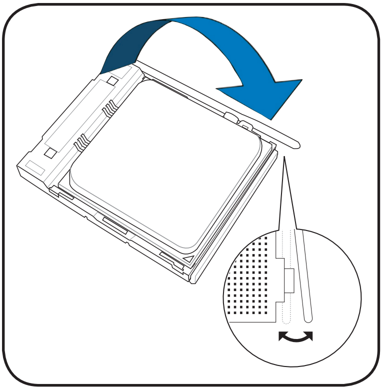


تأكد من رفع ذراع المقبس بزاوية قدرها ٩٠ درجة وإلا فلن تدخل وحدة المعالجة المركزية بشكل كامل.

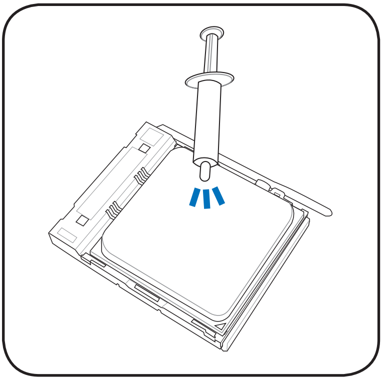
-٣ ضع وحدة المعالجة المركزية فوق المقبس بحيث يصبح ركن الوحدة الذي به شكل المثلث الذهبي في محاذاة ركن المقبس الذي به شكل مثلث صغير.

-٤ أدخل وحدة المعالجة المركزية بحرص داخل المقبس إلى أن تستقر في مكانها.





٥. بعد استقرار الوحدة، ادفع ذراع المقبس لأسفل لإحكام تثبيتها. يصدر عند دفع الذراع إلى ذلك الوضع صوت يشير إلى إحكام التثبيت.



٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.

يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

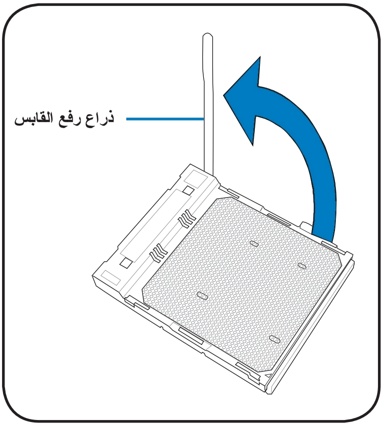
إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

١,١,١٠ قابس AMD AM3

يتوافق منفذ AMD AM3+ مع معالجات AMD AM3+ و AM3. تدعم طرازات معينة من لوحات AM3 الأم معالجات AM3+ من خلال ترقية نظام الدخل / الخرج الأساسي (BIOS). راجع موقع دعم ASUS للاطلاع على التفاصيل.

١. قم بتحديد مكان قابس وحدة المعالجة المركزية في اللوحة الأم.

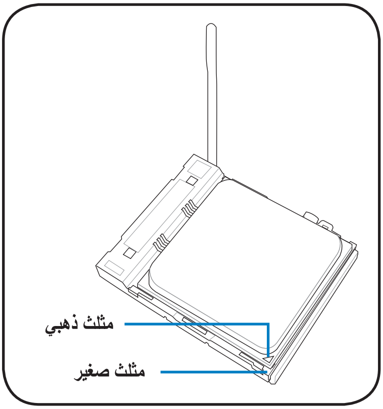
٢. اضغط على جانبي زراع التحريك للفتح القابس، ثم ارفعه بزاوية قدرها ٩٠º.

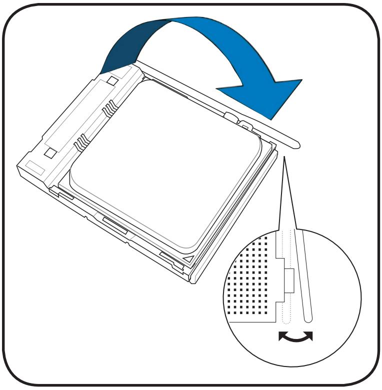


تأكد من رفع ذراع المقبس بزاوية قدرها ٩٠ درجة وإلا فلن تدخل وحدة المعالجة المركزية بشكل كامل.

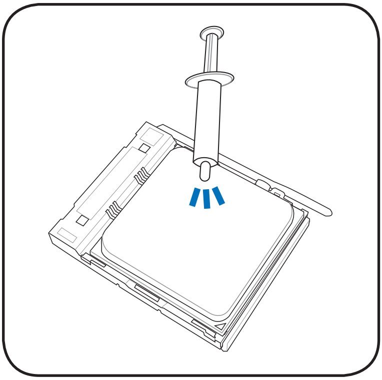
٣- ضع وحدة المعالجة المركزية فوق المقبس بحيث يصبح ركن الوحدة الذي به شكل المثلث الذهبي في محاذاة ركن المقبس الذي به شكل مثلث صغير.

٤- أدخل وحدة المعالجة المركزية بحرص داخل المقبس إلى أن تستقر في مكانها.





٥. بعد استقرار الوحدة، ادفع ذراع المقبس لأسفل لإحكام تثبيتها. يصدر عند دفع الذراع إلى ذلك الوضع صوت يشير إلى إحكام التثبيت.



٦. ضع مادة واجهة حرارية على المنطقة المكشوفة في وحدة المعالجة المركزية والتي تلامسها منطقة امتصاص الحرارة، مع التأكد نشرها بشكل متساوٍ على طبقة رفيعة.

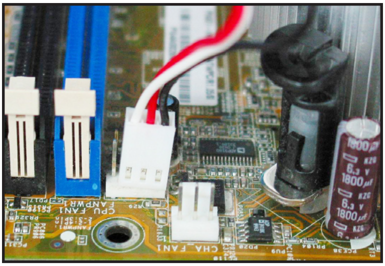
يتم شراء بعض ممتصات الحرارة مع عجينة حرارية سابقة الاستخدام. إذا كان الأمر كذلك، فتجاوز هذه الخطوة.

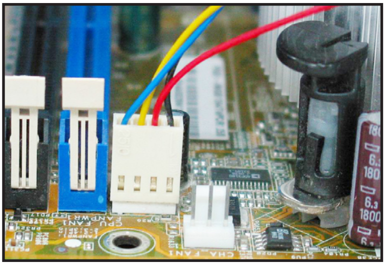
إن مادة الواجهة الحرارية مادة سامة وغير صالحة. لا يجب تناولها. إذا لامست العين أو البشرة، يجب غسلها بالماء على الفور واستشارة الطبيب على الفور.

٢-١ تركيب المشتت الحراري والمروحة

لتركيب المشتت الحراري ومروحة وحدة المعالجة المركزية:

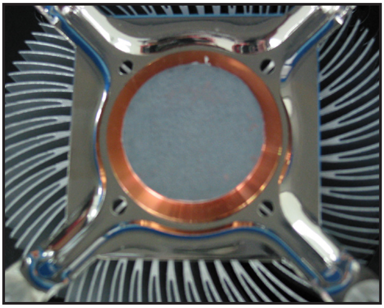
-١ قم باختيار وحدة مشتت حراري ومروحة معتمدين من شركة Intel أوAMD وفقاً للوحة الأم التي بين يديك. يوجد طرف توصيل مزود بثلاثة دبابيس (ناحية اليسار) وآخر مزود بأربعة دبابيس (ناحية اليمين) للمروحة. تجدر الإشارة إلى أن مراوح وحدات المعالجة المركزية المشتملة على أطراف التوصيل ذات الأربع الدبابيس هي فقط التي تدعم تقنية Q-Fan الخاصة بشركة ASUS.





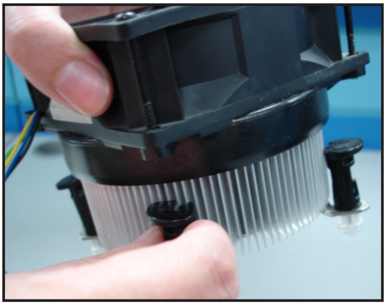
لتركيب مشتت حراري معتمد من قبل شركة Intel:

-٢ تأتي بعض المشتتات الحرارية مزودة بشكل مسبق بمعجون حراري. فإذا كان الأمر كذلك، فلا تقم بخدشه واحرص على عدم إزالة الغشاء الواقي إلا قبل عملية التركيب مباشرةً. أما إذا لم يكن المشتت مزوداً بمعجون حراري، فقم قبل تركيبه بوضع عدة قطرات من المعجون على المنطقة المكشوفة من وحدة المعالجة المركزية والتي ستكون على مقربة من المشتت الحراري. واحرص كذلك على توزيع المعجون بحيث يُكون طبقة رقيقة متساوية السُمك.

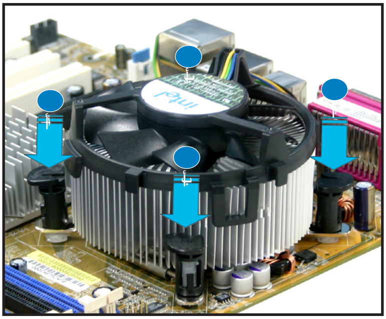


لتجنب تعرض المعجون للتلوث، لا تقم بتوزيعه مباشرةً بإصبعك.

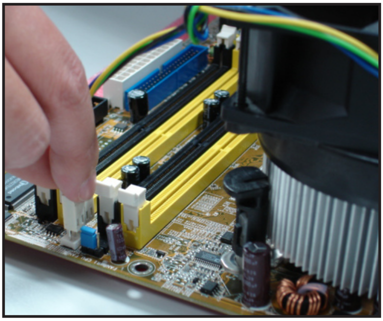
-٣ قم بتوجيه كافة أدوات التثبيت بحيث يتجه الطرف الضيق من الحزّ البارز للخارج.



٤- ادفع أداتي تثبيت في وقت واحد بتتابع قُطري لإحكام تثبيت وحدة المشتت الحراري والمروحة في موضعهما.



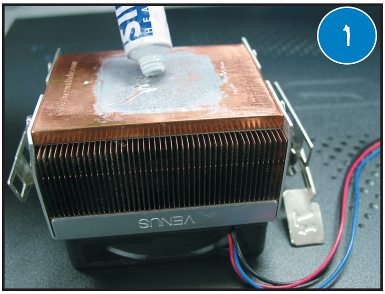
٥- قم بتوصيل كبل مروحة وحدة المعالجة المركزية بطرف التوصيل المناظر له باللوحة الأم.

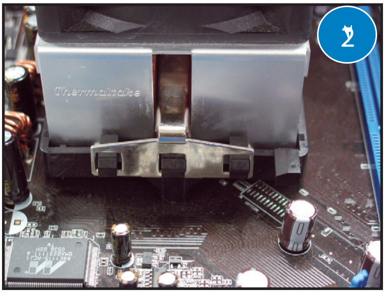


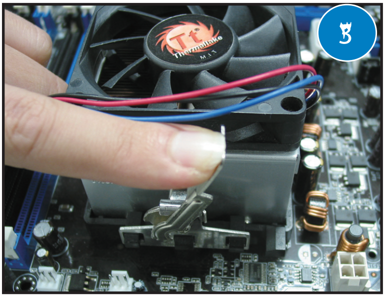
تذكر توصيل طرف توصيل مروحة وحدة المعالجة المركزية! إذ إن عدم توصيله قد ينجم عن وقوع أخطاء في مراقبة الأجهزة، ولذا فإننا نوصي باستخدام مشتت حراري متعدد الاتجاهات بغية الحصول على أكبر منطقة ممكنة لتشتيت الحرارة.

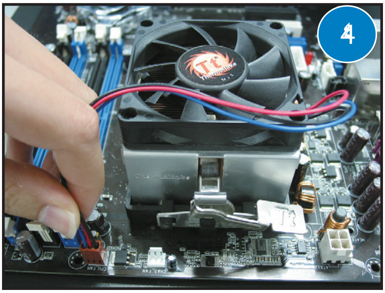
لتركيب مشتت حراري معتمد من قبل شركة AMD:

اتبع التعليمات الواردة أدناه لتركيب مشتت حراري معتمد من قبل شركة AMD.









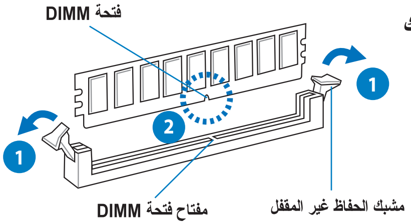
١,٣ تركيب DIMM

تأكد من فصل مصدر الطاقة قبل إضافة أو إزالة DIMM أو مكونات نظام أخرى. إن عدم القيام بذلك يمكن أن يؤدي إلى تلف بالغ في المكونات واللوحة الأم.

تركيب DIMM على مقبس DIMM مزدوج المشبك

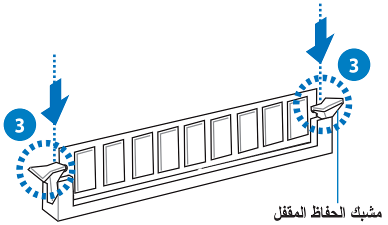
١. قم بإلغاء قفل مقبس DIMM بالضغط على مشابك الحفاظ للداخل.

٢. قم بمحاذاة وحدة DIMM في المقبس بحيث يتوافق الحز الموجود بوحدة DIMM مع مفتاح فتحة DIMM بالمقبس.



تتم حماية DIMM بسن حتى يتم تركيبها في اتجاه واحد فقط. لا تدفع وحدة DIMM إلى داخل المقبس في الاتجاه غير الصحيح لتجنب تلف وحدة DIMM.

٣. أمسك وحدة DIMM من كلا طرفيها، ثم أدخل وحدة DIMM رأسيًا في المقبس. اضغط على كلا طرفي وحدة DIMM في نفس الوقت حتى تثبت مشابك الاحتجاز في مكانها ولا يمكن دفع وحدة DIMM إلى مسافة أبعد لضمان سلامة تركيب وحدة DIMM.



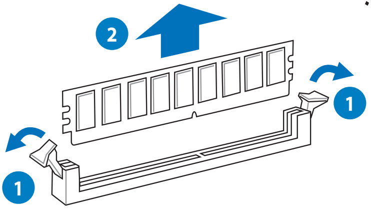
احرص دائمًا على إدخال وحدة DIMM في المقبس بشكل رأسي لتجنب تلف حز وحدة DIMM.

- لتركيب DIMM واحدة أو اثنين، راجع دليل المستخدم المرفق بحزمة اللوحة الأم.
- راجع دليل المستخدم للحصول على قوائم الموردين المؤهلين لوحدات الذاكرة.

إخراج وحدة DIMM من مقبس DIMM مزدوج المشابك

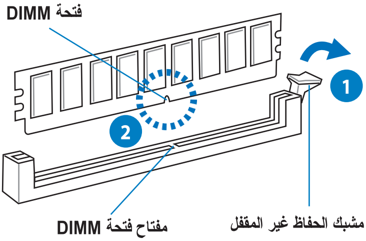
١. اضغط على مشابك الاحتجاز إلى الخارج في نفس الوقت لفتح وحدة DIMM.

٢. أخرج وحدة DIMM من المقبس.



اسند وحدة DIMM بأصابعك برفق عند الضغط على مشابك الاحتجاز. فقد تتلف وحدة DIMM إذا انقلبت للخارج بقوة شديدة.

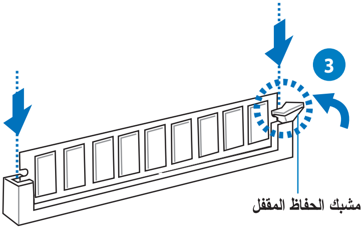
تركيب DIMM على مقبس DIMM مفرد المشبك



١. قم بإلغاء قفل مقبس DIMM بالضغط على مشابك الحفاظ للداخل.

٢. قم بمحاذاة وحدة DIMM في المقبس بحيث يتوافق الحز الموجود بوحدة DIMM مع مفتاح فتحة DIMM بالمقبس.

تتم حماية DIMM بسن حتى يتم تركيبها في اتجاه واحد فقط. لا تدفع وحدة DIMM إلى داخل المقبس في الاتجاه غير الصحيح لتجنب تلف وحدة DIMM.

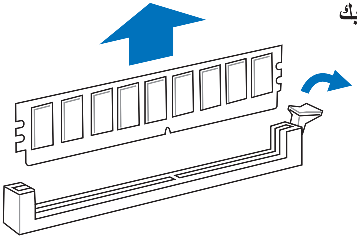


٣. أمسك وحدة DIMM من كلا طرفيها، ثم أدخل وحدة DIMM رأسيًا في المقبس. اضغط على كلا طرفي وحدة DIMM في نفس الوقت حتى تثبت مشابك الاحتجاز في مكانها ولا يمكن دفع وحدة DIMM إلى مسافة أبعد لضمان سلامة تركيب وحدة DIMM.

احرص دائمًا على إدخال وحدة DIMM في المقبس بشكل رأسي لتجنب تلف حز وحدة DIMM.

- لتركيب DIMM واحدة أو اثنين، راجع دليل المستخدم المرفق بحزمة اللوحة الأم.
- راجع دليل المستخدم للحصول على قوائم الموردين المؤهلين لوحدات الذاكرة.

إخراج وحدة DIMM من مقبس DIMM أحادي المشبك



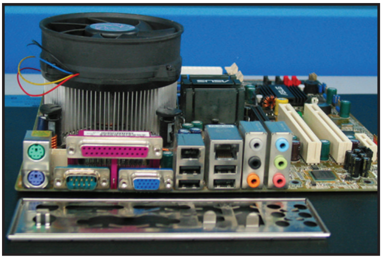
١. اضغط على مشبك الاحتجاز إلى الخارج لفتح وحدة DIMM.

٢. أخرج وحدة DIMM من المقبس.

اسند وحدة DIMM بأصابعك برفق عند الضغط على مشابك الاحتجاز. فقد تتلف وحدة DIMM إذا انقلبت للخارج بقوة شديدة.

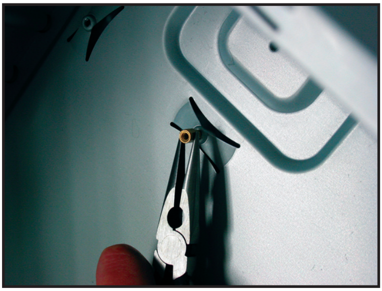
١-٤ تركيب اللوحة الأم

١- تختلف منافذ الدخل/الخرج باختلاف اللوحات الأم، لذا يتعين عليك استخدام وتركيب لوحة منافذ الدخل/الخرج الخلفية المرفقة مع عبوة اللوحة الأم دون غيرها.

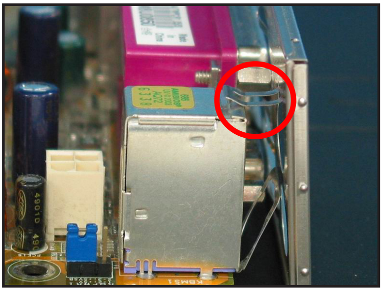


ربما تتسبب الأطراف والحواف الحادة في تعرضك للإصابة. لذا يُوصي بارتداء قفازات مقاومة للقطع أو الثقب قبل الشروع في تركيب اللوحة الأم ولوحة الدخل/الخرج.

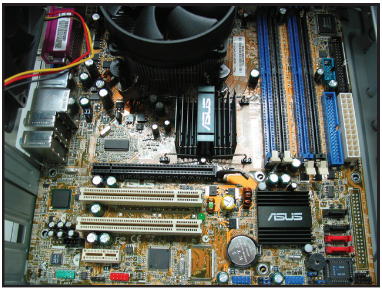
٢- قم بتثبيت القواعد على فتحات البراغي المناظرة في اللوحة المعدنية.



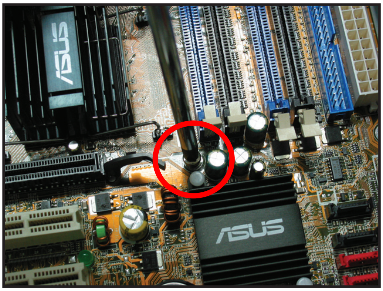
٣- قد تتسبب النوابض الموجودة في حافة لوحة الدخل/الخرج إلى تعرض منافذ الدخل/الخرج للتلف، لذا يجب توخي الحذر عند تركيب لوحة منافذ الدخل/الخرج.



٤- ضع اللوحة الأم بحيث يتجه جانب منافذ الدخل/الخرج نحو الجزء الخلفي من الشاسيه، ثم ضعها بداخله.



٥- أدخل البراغي أولاً ثم اربط كل منها بدون إحكام في تتابع قُطري. وبعد إدخال كافة البراغي، قم بتثبيتها بيديك.



- قد يلزمك فك الأغطية المعدنية الخاصة بفتحات بطاقات التوسعة والموجودة في الجانب الخلفي من الشاسيه قبل تركيب اللوحة الأم. يذكر أنه قد يصعب في بعض الطرازات فك غطاء فتحة التوسعة بعد إجراء التركيب.
- لا تقم بإحكام تثبيت البراغي أكثر مما ينبغي، فقد يؤدي ذلك إلى تعرض اللوحة الأم للتلف.

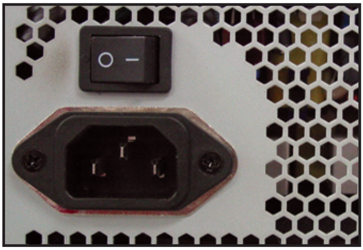
١-٥ تركيب وحدة الإمداد بالطاقة

هناك نوعان من وحدات الإمداد بالطاقة الشائعة الاستخدام. الأول يكون مزودا بمصحح معامل طاقة فعال (PFC) والثاني بمصحح معامل طاقة غير فعال.

١- اختر إحدى وحدات الإمداد بالطاقة.

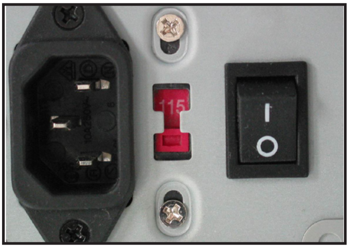
وحدة إمداد بالطاقة مزودة بمصحح معامل طاقة فعال:

يقوم المصحح الفعال لمعامل الطاقة بتصحيح فولتية دخل التيار المتردد تلقائياً.



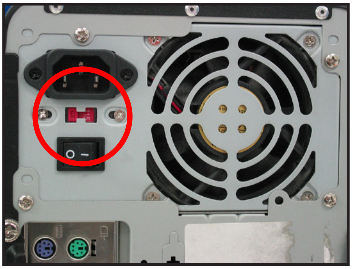
وحدة إمداد بالطاقة مزودة بمصحح معامل طاقة غير فعال:

يتطلب استخدام مصحح معامل طاقة غير فعال القيام بضبط فولتية دخل التيار المتردد يدوياً.



٢- في حالة استخدام وحدة إمداد بالطاقة مزودة بمصحح معامل طاقة غير فعال، يجب ضبط فولتية دخل التيار المتردد على النحو الصحيح المستخدم في المنطقة.

مع العلم بأن الإخفاق في القيام بذلك سيؤدي إلى إحداث أضرار جسيمة بالنظام.



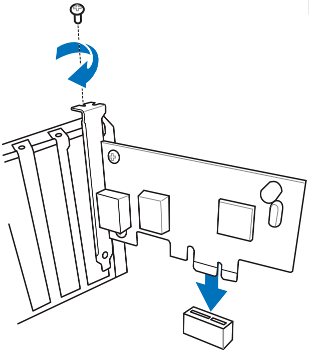
يوصى باستخدام وحدات الإمداد بالطاقة المعتمدة صلاحيتها للاستخدام الآمن دون غيرها، إذ إن استخدام الوحدات غير المستقرة من شأنه إلحاق الضرر باللوحة الأم والمكونات الأخرى. يرجى الرجوع إلى دليل الاستخدام للتعرف على وحدات الإمداد بالطاقة التي تتوافق مع متطلبات اللوحة الأم.

٦-١ تركيب بطاقة توسعة

لتركيب بطاقة توسعة:

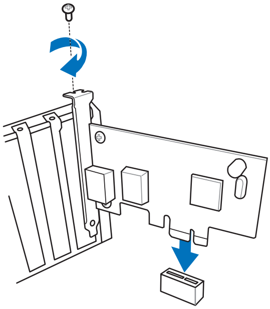
١- قم بإزالة الغطاء المعدني المواجه لفتحة بطاقة التوسعة المراد تركيب البطاقة بها.
٢- قم بتركيب بطاقة التوسعة وتأكد من استقرارها داخل الفتحة على نحو سليم.
٣- استخدم البراغي في تثبيت البطاقة في الفتحة.
٤- كرر الخطوات السابق ذكرها عند تركيب بطاقة توسعة أخري.

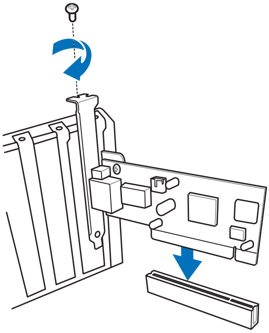
بطاقة PCIE x16



بطاقة PCIE x1

بطاقة PCI



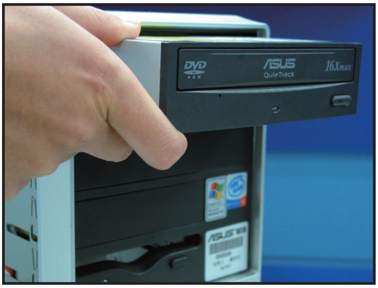


- يُرجى الرجوع إلى الوثائق المرفقة مع البطاقة للتعرف على تفاصيل تهيئة البطاقة، وإلى دليل استخدام اللوحة الأم عند الحاجة إلى تهيئة أية وصلات عبور عقب تركيب بطاقة التوسعة.
- يرجى كذلك الرجوع إلى دليل استخدام اللوحة الأم لمعرفة التعليمات ذات الصلة بتوصيل كبل الإشارة الخاص ببطاقة التوسعة.

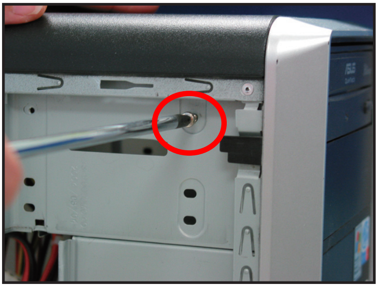
١-٧ تركيب محركات الأقراص

١-٧-١ محرك الأقراص الضوئية PATA

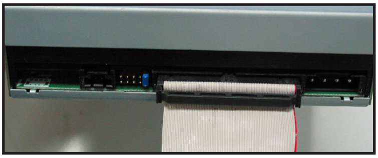
١- فك الغطاء الواقي وأدخل محرك الأقراص الضوئية في المكان المخصص له.



٢- قم بمحاذاة فتحات البراغي مع بعضها البعض ثم أحكم تثبيت المحرك باستخدام البراغي.

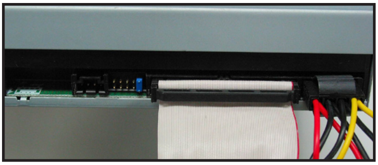


٣- ضع كبل IDE في المكان المخصص له ثم وصله بمحرك الأقراص الضوئية. يذكر أن الخط الأحمر الموجود بكبل IDE يمثل الدبوس ١ ويجب أن يقابل الدبوس ١ في محرك الأقراص الضوئية.

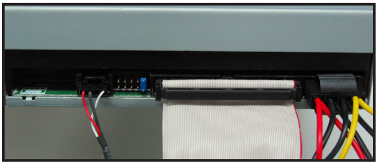


تتسم كبلات IDE بسهولة الاستخدام. ويرجى تجنب استعمال القوة تماماً عند إدخال كبل IDE في طرف التوصيل.

٤- قم بتوصيل كبل الطاقة المزود بأربعة دبابيس بمحرك الأقراص الضوئية.



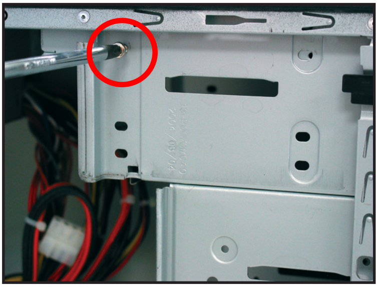
٥- وصل كبل الصوت بطرف التوصيل الموجود بمحرك الأقراص الضوئية.



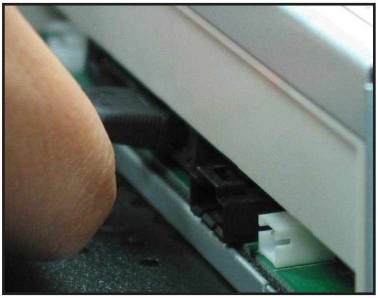
١-٧-٢ محرك الأقراص الضوئية SATA

١- فك الغطاء الواقي وأدخل محرك الأقراص الضوئية في المكان المخصص له.

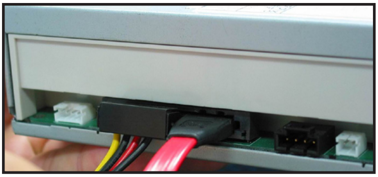
٢- قم بمحاذاة فتحات البراغي مع بعضها البعض ثم أحكم تثبيت المحرك باستخدام البراغي.



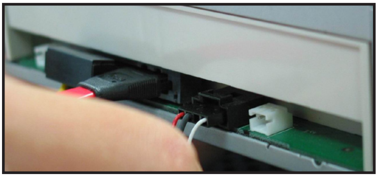
٣- ضع كبل SATA في موضعه ثم وصله بمحرك الأقراص الضوئية. علماً بأن كبلات SATA تتسم بسهولة الاستخدام. ويرجى عدم استخدام القوة تماماً عند إدخال كبل SATA في طرف التوصيل.



٤- قم بتوصيل كبل الطاقة SATA بمحرك الأقراص الضوئية.

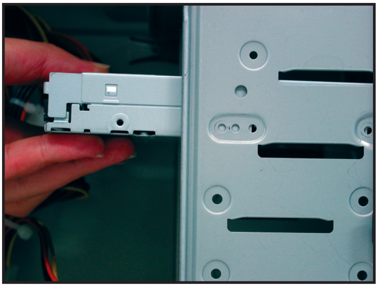


٥- وصل كبل الصوت بطرف التوصيل الموجود بمحرك الأقراص الضوئية.

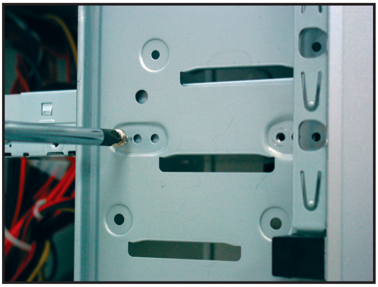


١-٧-٣ محرك الأقراص المرنة

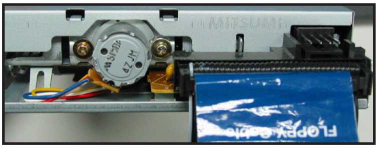
١- فك الغطاء الواقي وأدخل محرك الأقراص المرنة في المكان المخصص له.



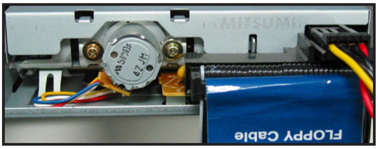
٢- قم بمحاذاة فتحات البراغي مع بعضها البعض ثم أحكم تثبيت المحرك باستخدام البراغي.



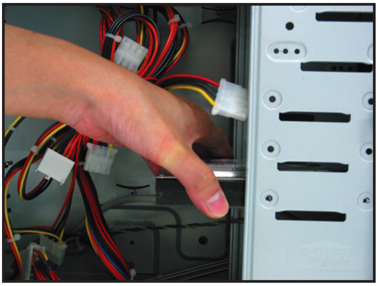
٣- ضع كبل توصيل محركات الأقراص المرنة في موضعه ثم وصله بالمحرك. يذكر أن الخط الأحمر الموجود بالكبل يمثل الدبوس ١، ومن ثم يجب أن يقابل الدبوس١ الموجود بمحرك الأقراص المرنة.



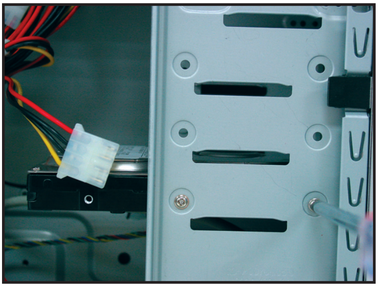
٤- قم بتوصيل كبل الطاقة الخاص بمحرك الأقراص المرنة بطرف التوصيل الموجود في الجانب الخلفي من المحرك.



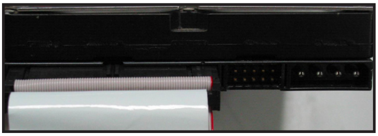
٤-٧-١ محرك الأقراص الثابتة PATA



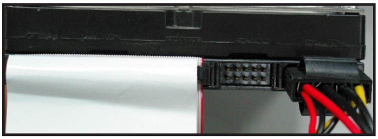
١- أدخل محرك الأقراص الثابتة PATA في المكان المخصص له.



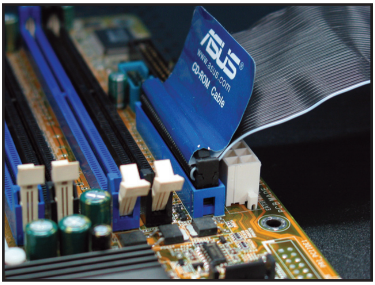
٢- قم بمحاذاة فتحات البراغي مع بعضها البعض ثم أحكم تثبيت المحرك باستخدام البراغي.



٣- ضع كبل الإشارة في موضعه ثم قم بتوصيله بمحرك الأقراص الثابتة. وتذكر أن الخط الأحمر الموجود بالكبل يمثل الدبوس ١، فاحرص على محاذاة السن الذي يسهل العثور عليه وعدم استخدام القوة عند إدخال الكبل في منفذ التوصيل.

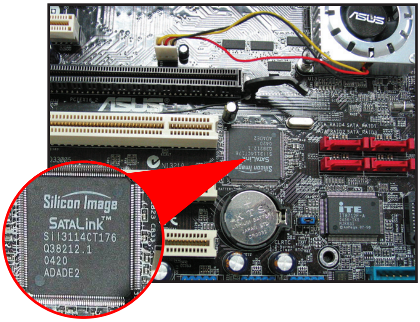


٤- وصل كبل الطاقة المزود بأربعة دبابيس بطرف التوصيل الموجود في الجانب الخلفي من المحرك.



٥- وصل الطرف الآخر من كبل الإشارة بالفتحة المناظرة له باللوحة الأم.

ملاحظات حول تركيب محرك الأقراص الثابتة PATA



- إذا كان يتم التحكم في نظام التشغيل المثبت على محرك الأقراص الثابتة من خلال وحدة تحكم تدعم تقنية RAID أو غيرها من وحدات التحكم، فإنه يتعين عليك تثبيت برنامج تشغيل وحدة التحكم على القرص الثابت أولاً.

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FLOPPY Cable
ASUS
www.asus.com
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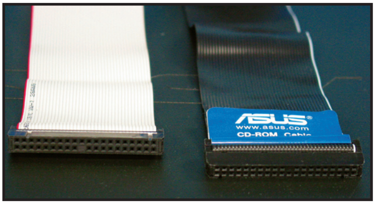
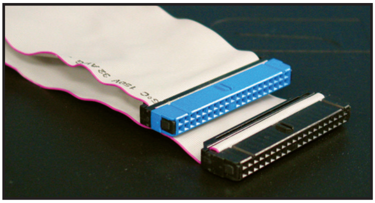
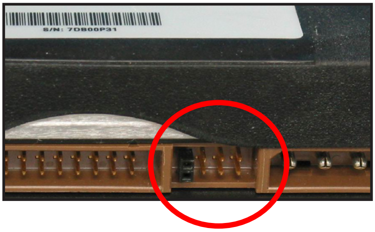
- روعي عند تصميم الكبلات تزويدها بألسنة سحب. وبالتالي كل ما عليك فعله هو تركيب محركات الأقراص وفقاً لما هو موضح بالملصق الموجود علي كل كبل. ولتفادي تعرض الدبابيس للتلف، افصل الكبل عن طريق سحب الألسنة الموجودة به.



- يوجد نوعان من كبلات محركات الأقراص ATA IDE، الأول وهو النوع الأحدث لا يحتوي على أية أسلاك (على اليمين)، والثاني وهو النوع الأقدم يحتوي على ٤٠ سلكا (على اليسار). وبالنسبة لمحركات الأقراص ATA/100/133، فإن النوع الذي لا يحتوي على أية أسلاك من شأنه تقديم أداء أفضل. أما النوع الذي يحتوي على ٤٠ سلكاً فعادةً ما يستخدم مع محركات الأقراص الضوئية.



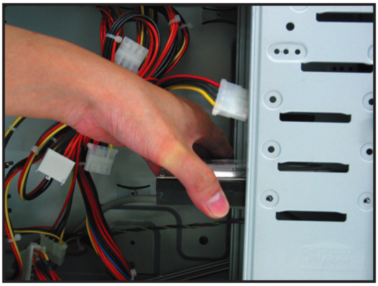
- تأخذ أطراف توصيل الكبلات ألواناً مميزة لها. فطرف التوصيل ذي اللون الأزرق مخصص لطرف التوصيل المضيف، أما ذي اللون الأسود/الرمادي فهو مخصص لمحرك الأقراص الرئيسي/الثانوي.



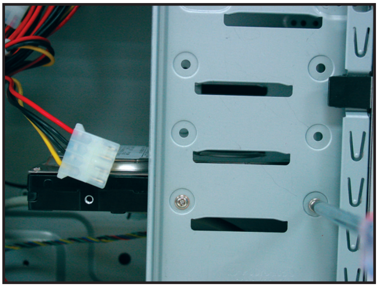
- عند توصيل جهازين IDE، يجب عليك وضع وصلات العبور في مواضع مختلفة، بحيث يتم توصيل واحدة بالجهاز الرئيسي والأخرى بالجهاز التابع. وفي حالة استخدام كبل يحتوي على ٨٠ سلكاً، فإنه يمكنك استخدام نمط اختيار الكبلات.

١-٧-٥ محرك الأقراص الثابتة SATA

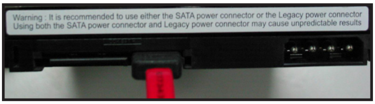
١- أدخل محرك الأقراص الثابتة SATA في المكان المخصص له.



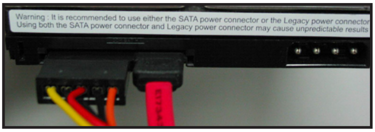
٢- قم بمحاذاة فتحات البراغي مع بعضها البعض ثم أحكم تثبيت المحرك باستخدام البراغي.



٣- ضع كبل SATA في موضعه ثم قم بتوصيله بمحرك الأقراص الثابتة. علماً بأنه لا يمكن تركيب هذا الكبل إلا في اتجاه واحد.

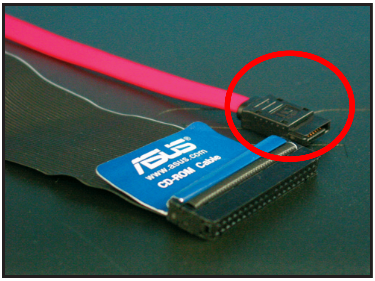

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

٤- قم بتوصيل كبل الطاقة SATA بطرف التوصيل الموجود في الجانب الخلفي لمحرك الأقراص الثابتة.


Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

ملاحظات حول تركيب محرك الأقراص الثابتة SATA

- توفر وسائل التوصيل ATA التسلسلية (SATA) سرعة أعلى لنقل البيانات ودرجة أفضل لتحمل تفاوت الفولتية. كما أن التصميم الرفيع الذي تتميز به هذه الكبلات يوفر الحل الأمثل لمشكلة تداخل الكبلات ويسمح بتدفق كمية أكبر من الهواء داخل الشاسيه.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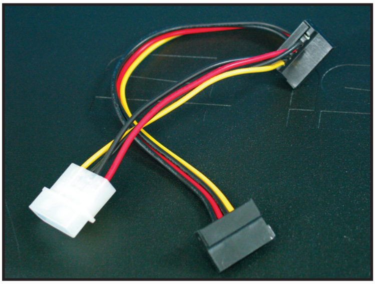
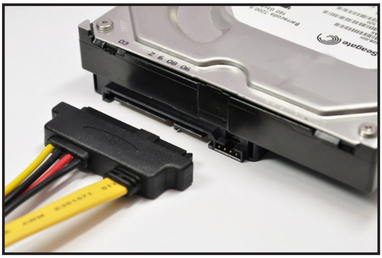
- يختلف طرف التوصيل الخاص بكبل الطاقة SATA عن طرف توصيل الطاقة التقليدي ذي الأربعة دبابيس. وجدير بالذكر أنه مرفق مع اللوحة الأم من إنتاج ASUS كبلات مهايئ طاقة تحسباً لعدم اشتمال وحدة الإمداد بالطاقة الخاصة بك على هذا النوع الجديد من منافذ التوصيل.

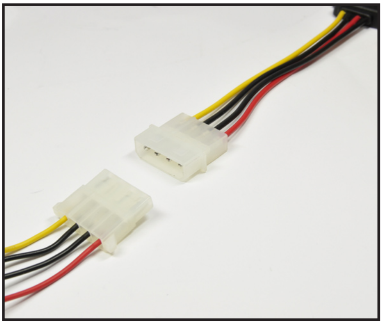


١-٧-٥ محرك الأقراص الثابتة SAS

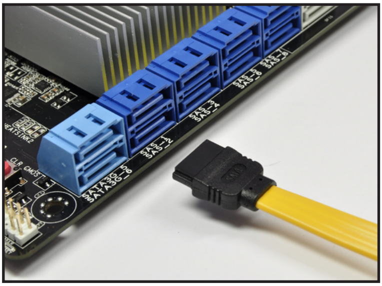
١. قم بتوجيه وتوصيل الكابل المُجمّع لإشارة SAS / الطاقة بمحرك الأقراص الصلبة.
الجانب الخلفي لمحرك الأقراص الثابتة.



٢. صل كابل طاقة SAS بموصل الطاقة في وحدة تزويد الطاقة.



٣. صل كابل إشارة SAS بموصل SAS في اللوحة الأم.

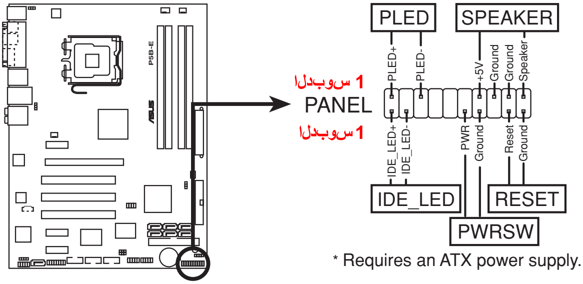

SATA3G_5
SATA3G_6
SAS_1
SAS_2
SAS_3
SAS_4
SAS_5
SAS_6
CLR_CMOS

٨-١ كبلات اللوحة الأمامية

لتوصيل كبلات اللوحة الأمامية:

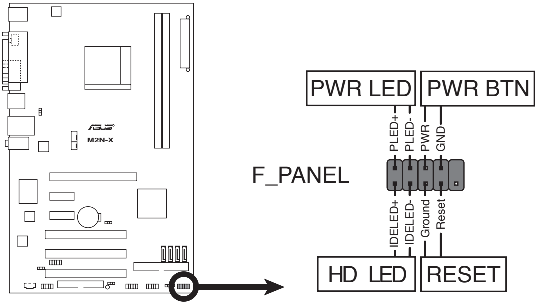
- RESET (مفتاح إعادة التشغيل)
- PLED (مؤشر بيان حالة الطاقة)
- PWRSW (مفتاح الطاقة)
- IDE_LED (مؤشر بيان حالة محرك الأقراص الثابتة IDE النشط)
- SPEAKER (طرف توصيل السماعة)

طرف توصيل باللوحة الأمامية به ٢٠-٨ دبوس


P5B-E
ASUS
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
الدبوس 1
PANEL
الدبوس 1
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

طرف توصيل باللوحة الأمامية به ١٠-١ دبوس

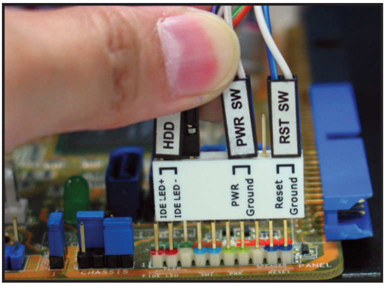

ASUS
M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- قد تختلف كبلات اللوحة الأمامية للشاسيه باختلاف الطرازات والتصميمات، لذا يرجى توصيل هذه المنافذ باللوحة الأم وفقا لما هو وارد بالملصقات.
- في حالة عدم إضاءة المؤشرات بالرغم من صحة وضع الدبابيس، فربما تكون أبدلت دبابيس التأريض مكان دبابيس الإشارة. يمثل السلك الأبيض عادةً دبابيس التأريض، بينما يمثل السلك ذي الألوان المميزة دبابيس الإشارة.
- ليس هناك اتجاه محدد لتركيب كل من كبلات SPEAKER (السماعة) وRESET (مفتاح إعادة التشغيل) وPWRSW (مفتاح الطاقة) باللوحة الأمامية، بينما يجب الالتزام باتجاه محدد عند تركيب كبلي IDE_LED (مؤشر بيان حالة IDE) وPLED (مؤشر بيان حالة الطاقة)، قم بتوصيل كبل الدبوس 1 بطرف توصيل الدبوس 1 باللوحة الأم.
- تختلف أطراف توصيل اللوحة الأمامية وفقا لطرازات اللوحة الأم، راجع دليل الاستخدام للاطلاع على المزيد من المعلومات.

طرف توصيل Q من ASUS

يتيح طرف التوصيل Q من ASUS إمكانية التركيب في خطوة واحدة مما يوفر عليك الكثير من الوقت والمعاناة في التعامل مع كبلات اللوحة الأمامية. راجع دليل الاستخدام للحصول على مزيد من التفاصيل.

Q-Connector

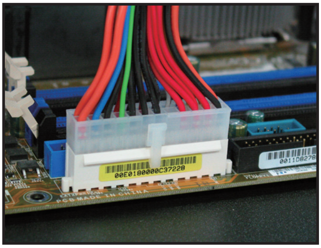

HDD
PWR SW
RST SW
IDE LED+
IDE LED-
PWR
Ground
Reset
Ground
CHASSIS
PANEL

يتاح طرف التوصيل Q في طرازات محددة فقط، لذا يرجى الرجوع إلى دليل الاستخدام لمزيد من التفاصيل.

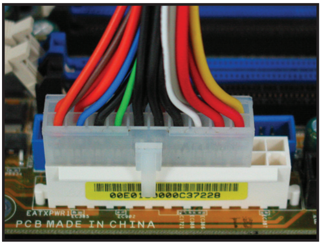
٩-١ توصيل موصلات الطاقة ATX

لا يمكن تركيب كبلات موصلات الطاقة ATX إلا باتجاه واحد فقط. ولابد من استخدام المشبك الجانبي لتثبيت الموصلات باللوحة الأم. واحرص على ألا تدفع موصلات الطاقة الذكر بقوة عند إدخالها في المقابس الأنثى الموجودة باللوحة الأم. وعادة ما يوجد طرفي توصيل في اللوحة الأم، أحدهما يحتوي على ٢٤ دبوسا والآخر يحتوي على ٤ دبابيس. قد لا تشتمل بعض وحدات الإمداد بالطاقة القديمة الطراز إلا على طرف توصيل ذي ٢٠ دبوسا إلا أنها تصلح كذلك للتوصيل بالطرف ذي الـ ٢٤ دبوسا الموجود باللوحة الأم.

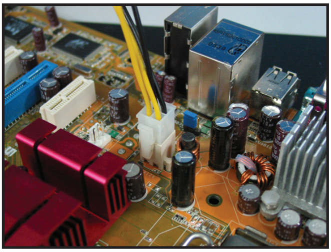
طرف توصيل طاقة ذو ٢٤ دبوسا



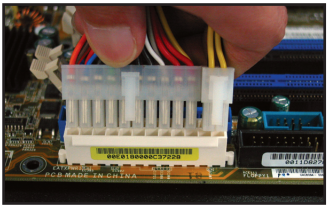
طرف توصيل طاقة ذو ٢٠ دبوسا
(يتم تركيبه على المقبس الأنثى ذو ٢٤ دبوسا)

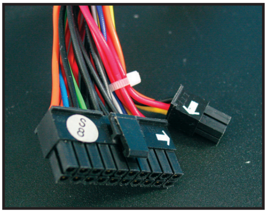

EATXPWR
PCB MADE IN CHINA

طرف توصيل طاقة ذو ٤ دبابيس



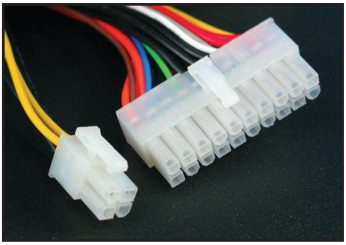
- تجنب توصيل التيار الكهربائي الخارجي عند تركيب موصلات الطاقة الخاصة باللوحة الأم.
- تأكد من إحكام تثبيت الموصلات على اللوحة الأم.
- إذا كانت وحدة الإمداد بالطاقة الخاصة بك تدعم الموصلات ذات ٢٠ دبوساً و ٤ دبابيس، فبوسعك دمج هذين الموصلين معاً، ومن ثم التركيب على منافذ التوصيل ذات ٢٤ دبوسا في اللوحة الأم.



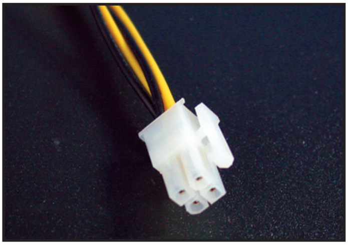


موصلات الطاقة

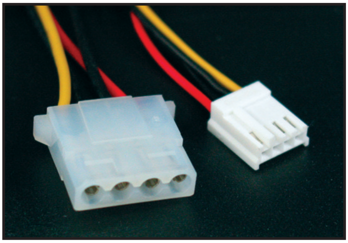
موصل ATX ٢٠+٤ (٢٤) دبوساً



موصل ATX ٤ دبابيس

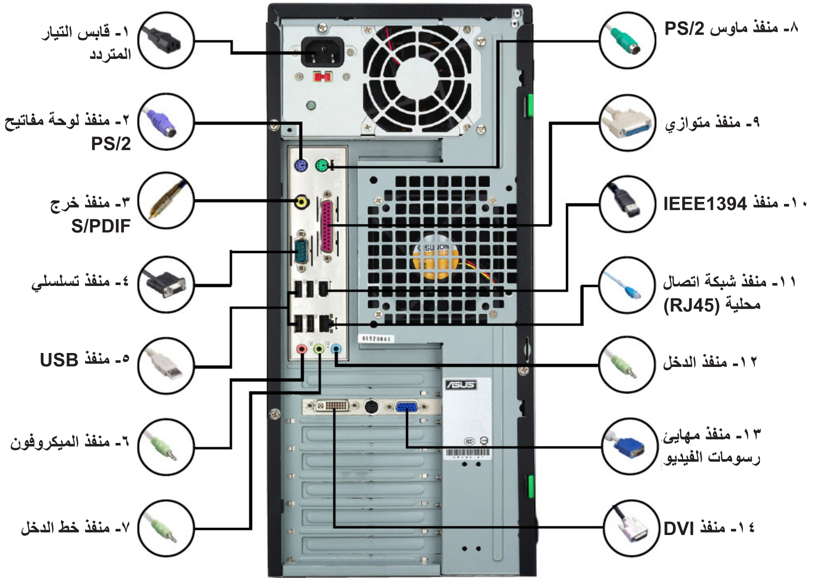


موصل طاقة للأجهزة الطرفية (على اليسار)
موصل محرك أقراص مرنة (على اليمين)



١٠-١ الملحقات والأجهزة الطرفية

راجع الشكل التالي لتتمكن من توصيل الملحقات والأجهزة الطرفية.


١- قابس التيار المتردد
٢- منفذ لوحة مفاتيح PS/2
٣- منفذ خرج S/PDIF
٤- منفذ تسلسلي
٥- منفذ USB
٦- منفذ الميكروفون
٧- منفذ خط الدخل
٨- منفذ ماوس PS/2
٩- منفذ متوازي
١٠- منفذ IEEE1394
١١- منفذ شبكة اتصال محلية (RJ45)
١٢- منفذ الدخل
١٣- منفذ مهايئ رسومات الفيديو
١٤- منفذ DVI

قابس التيار المتردد لتوصيل وصلة إطالة

٢- منفذ لوحة مفاتيح PS/2 لتوصيل لوحة مفاتيح

٣- منفذ خرج S/PDIF لتوصيل نظام سماعات رقمي ٥٫١

٤- منفذ تسلسلي لتوصيل وحدة تشغيل جهاز المساعد الرقمي الشخصي (PDA)

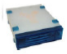
٥- منفذ USB لتوصيل أجهزة USB

٦- منفذ الميكرفون لتوصيل ميكرفون

٧- منفذ خرج لتوصيل سماعات

٨- منفذ ماوس PS/2 لتوصيل ماوس

٩- منفذ متوازي لتوصيل طابعة


١٠- منفذ IEEE1394 لتوصيل محرك الأقراص ثابتة خارجي

١١- منفذ شبكة اتصال محلية (RJ45) لتوصيل مودم

١٢- منفذ دخل لتوصيل مسجل

١٣- منفذ VGA لتوصيل شاشة CRT

١٤- منفذ DVI لتوصيل شاشة LCD

تختلف منافذ التوصيل الموجودة باللوحة الخلفية باختلاف الطرازات، لذا يرجى الرجوع إلى دليل الاستخدام للحصول على مزيد من التفاصيل.

١-١١ بدء التشغيل للمرة الأولى

يبدأ النظام في إجراء اختبارات ذاتية عند بدء التشغيل تعرف اختصاراً باسم POST. وفي أثناء إجراء هذه الاختبارات، تصدر إشارة صوتية من نظام BIOS (راجع رموز الإشارات الصوتية الصادرة عن نظام BIOS في الجدول الوارد أدناه)

إشارات BIOS الصوتية	الوصف
إشارة صوتية مستمرة متبوعة بثلاث إشارات قصيرة.	لم يتم الكشف عن إشارة VGA.
إشارة صوتية مستمرة بإشارتين قصيرتين ثم توقف مؤقت (تكرار).	لم يتم الكشف عن وجود وحدة ذاكرة.
إشارة صوتية مستمرة متبوعة بأربع إشارات قصيرة.	حدوث فشل يتعلق بمكونات الجهاز (AMI BIOS).
أربع إشارات صوتية قصيرة.	حدوث فشل يتعلق بمكونات الجهاز (AWARD BIOS).

استكشاف الأعطال وإصلاحها

العطل	الإجراء
• يتعذر تشغيل جهاز الكمبيوتر. • مؤشر بيان حالة الطاقة غير مضيء. • مروحة وحدة الإمداد بالطاقة لا تعمل.	تأكد من توصيل كبل الطاقة على النحو الصحيح.
الكمبيوتر يعمل لكن الشاشة لا تعمل.	• تأكد من وجود الشاشة في وضع التشغيل ومن توصيل كبل VGA على النحو الصحيح. • اضبط مستوى سطوع وتباين الشاشة. • قم بإيقاف تشغيل جهاز الكمبيوتر وافصل كبل الطاقة. تحقق من تركيب بطاقة VGA بإحكام.
لم يتم الكشف عن وجود وحدة ذاكرة.	• تأكد من وجود وحدة الذاكرة في وضعها الصحيح. • تأكد من تثبيت وحدات DIMM جيداً في المقبس الخاص بها. • تأكد من شراء وحدة الذاكرة من أحد البائعين الواردين في قائمة البائعين المعتمدين. راجع دليل الاستخدام للحصول على قائمة بالبائعين المعتمدين.
خطأ في محرك الأقراص المرنة (المؤشر مضاء دائماً أو ظهور رسالة تحذير على الشاشة).	• تحقق من تهيئة BIOS الخاصة بمحرك الأقراص المرنة. • تأكد من تركيب كبلات محرك الأقراص المرنة بشكل صحيح.
خطأ في محرك الأقراص الثابتة/ الضوئية (لم يتم التعرف عليه أو الكشف عنه).	• تأكد من صحة إعدادات وصلة العبور. (رئيسي/تابع) • تحقق من تهيئة BIOS الخاصة بمحرك الأقراص الثابتة/ الضوئية. • تأكد من تركيب كبلات الجهاز بإحكام. • تأكد من تثبيت برامج تشغيل الجهاز.

الفصل الثاني: إدارة/تحديث BIOS

٢-١ الأداة المساعدة AFUDOS

تتيح لك الأداة المساعدة AFUDOS إمكانية تحديث ملف نظام BIOS في وضع DOS باستخدام قرص مرن قابل لإعادة التمهيد مع ملف نظام BIOS الذي تم تحديثه. وهي تمكنك كذلك من نسخ ملف BIOS الحالي، ومن ثَم يمكنك استخدامه كنسخة احتياطية في حالة فشل نظام BIOS أو تعرضه للتلف أثناء عملية التحديث.

نسخ ملف نظام BIOS الحالي

لنسخ ملف نظام BIOS الحالي باستخدام الأداة المساعدة AFUDOS:

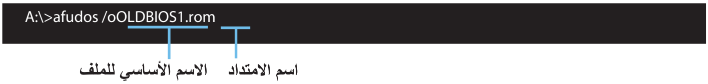
- تأكد من أن القرص المرن غير محمي ضد الكتابة عليه وتتوفر به مساحة خالية تبلغ ١٠٢٤ كيلو بايت على الأقل لحفظ الملف.
- شاشات BIOS التالي عرضها هي لأغراض التوضيح فحسب، وقد لا تتماثل شاشة BIOS الفعلية مع تلك التي تظهر أثناء عملية التحديث.

١- قم بنسخ الأداة المساعدة AFUDOS (afudos.exe) من قرص DVD المرفق مع اللوحة الأم على القرص المرن القابل للتمهيد الذي قمت بإنشائه سابقاً.

٢- قم بتمهيد تشغيل النظام في وضعDOS ثم عند ظهور موجه DOS، اكتب ما يلي:

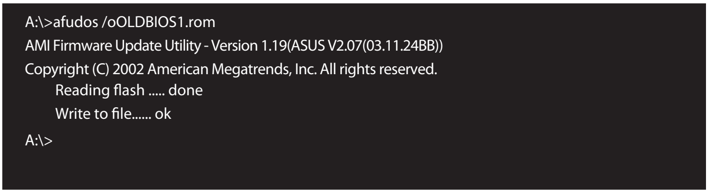
afudos /o [اسم الملف]

[اسم الملف] هو اسم يحدده المستخدم بحيث لا يتجاوز ثمانية رموز أبجدية رقمية بالنسبة للاسم الأساسي للملف وثلاثة رموز أبجدية رقمية للامتداد.



```
A:\>afudos /oOLDBIOS1.rom
```

٣- اضغط على <Enter> (إدخال). تقوم الأداة المساعدة بنسخ ملف BIOS الحالي إلى القرص المرن.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
      Reading flash ..... done
      Write to file...... ok
A:\>
```

ثم تعود الأداة إلى موجه DOS بعد نسخ ملف BIOS الحالي.

تحديث ملف BIOS

لتحديث ملف BIOS باستخدام الأداة المساعدة AFUDOS:

١- قم بزيارة موقع شركة ASUS الإلكتروني (www.asus.com) وتنزيل أحدث ملف لنظام BIOS للوحة الأم. احفظ ملف BIOS على أحد الأقراص المرنة القابلة للتمهيد.

قم بتدوين اسم ملف BIOS على ورقة. مع العلم بأنه يتعين عليك كتابة اسم ملف BIOS بنفس الصيغة الموجودة في موجه DOS.

٢- قم بنسخ الأداة المساعدة AFUDOS (afudos.exe) من قرص DVD المرفق مع اللوحة الأم على القرص المرن القابل للتمهيد الذي قمت بإنشائه سابقاً.

٣- قم بتمهيد النظام في وضعDOS ، ثم عند ظهور موجه النظام اكتب ما يلي:

afudos /i [اسم الملف]

و[اسم الملف] هو اسم ملف BIOS الأحدث أو الأصلي على القرص المرن القابل للتمهيد.

```
A:\>afudos /iP5K3D.ROM
```

٤- تقوم الأداة بالتحقق من الملف وتبدأ في تحديث BIOS.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

WARNING!! Do not turn off power during flash BIOS
Reading file ....... done
Reading flash ...... done

Advance Check ......
Erasing flash ...... done
Writing flash ...... 0x0008CC00 (9%)
```

لا تقم مطلقاً بإيقاف تشغيل النظام أو إعادة تشغيله أثناء تحديث BIOS وذلك لمنع حدوث فشل في عملية تمهيد النظام!

٥- تعود الأداة إلى موجه DOS بعد انتهاء عملية تحديث BIOS. أعد تمهيد النظام من محرك الأقراص الثابتة.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

WARNING!! Do not turn off power during flash BIOS
Reading file ....... done
Reading flash ...... done

Advance Check ......
Erasing flash ...... done
Writing flash ...... done
Verifying flash .... done

Please restart your computer

A:\>
```

٢-٢ الأداة المساعدة Award BIOS Flash Utility

تحديث BIOS

يمكن تحديث نظام الدخل/الخرج الأساسي (BIOS) باستخدام الأداة المساعدة AwardBIOS Flash Utility. يرجى اتباع التعليمات التالية لتحديث BIOS باستخدام هذه الأداة.

١- قم بتنزيل أحدث ملف BIOS من الموقع الإلكتروني الخاص بشركة ASUS، ثم أعد تسمية الملف واحفظه باسم M2N32SLI.BIN على قرص مرن أو قرص مدمج أو قرص فلاش USB **بتنسيق FAT 16/12**.

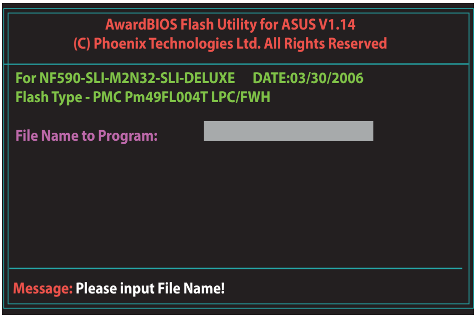
احفظ ملف BIOS الذي تم تحديثه فقط على القرص تجنباً لتحميل ملف BIOS خاطئ.

٢- انسخ أداة AwardBIOS Flash Utility (awdflash.exe) من مجلد البرامج الموجود في القرص المدمج المرفق على القرص المرن أو المدمج أو قرص فلاش USB مع أحدث ملف BIOS .

٣- قم بتمهيد النظام في وضع DOS باستخدام القرص المرن القابل للتمهيد أو القرص المدمج أو قرص فلاش USB الذي قمت بإنشائه مسبقاً.

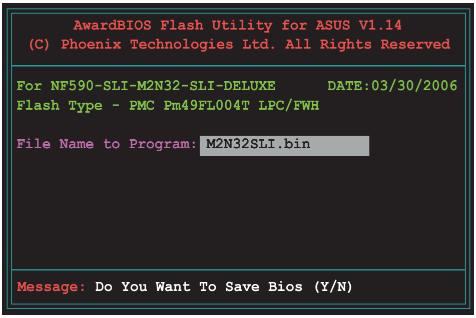
٤- في وضع DOS، استخدم <X:> (ترمز X لاسم الملف) للانتقال إلى المجلد الموجود على القرص المرن أو القرص المدمج أو قرص فلاش USB الذي قمت فيه بحفظ ملف BIOS و Award BIOS Flash Utility.

٥- عند ظهور الموجه، اكتب awdflash ثم اضغط على <Enter> (إدخال). فتظهر شاشة Award BIOS Flash Utility.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE    DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

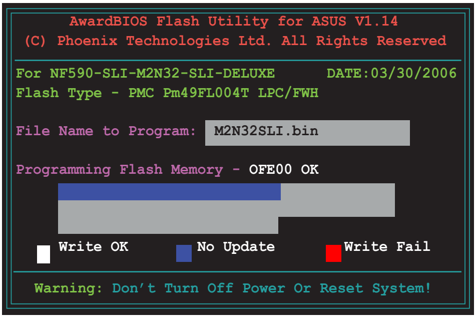
٦- اكتب اسم ملف BIOS في حقل File Name to Program (اسم الملف المطلوب برمجته)، ثم اضغط على <Enter> (إدخال).



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: M2N32SLI.bin

Message: Do You Want To Save Bios (Y/N)
```

٧- اضغط على <N> عندما تطلب الأداة المساعدة حفظ ملف BIOS الحالي، حيث تظهر الشاشة التالية.

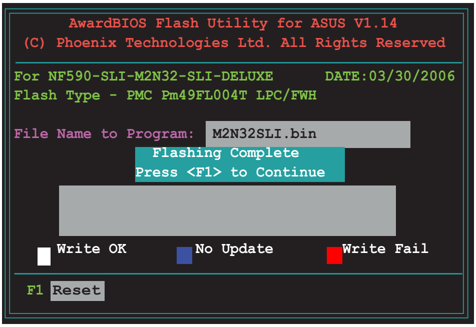
٨- تتحقق الأداة المساعدة من وجود ملف BIOS في القرص المرن أو القرص المدمج أو قرص فلاش USB ثم تبدأ في نسخ ملف BIOS.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin

Programming Flash Memory - OFE00 OK

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

   Warning: Don't Turn Off Power Or Reset System!
```

لا تقم بإيقاف تشغيل النظام أو إعادة تشغيله أثناء عملية النسخ!

٩- تعرض الأداة المساعدة رسالة Flashing Complete (الانتهاء من العرض) لتأكيد نجاح نسخ ملف BIOS. أخرج القرص ثم اضغط على <F1> لإعادة تشغيل النظام.



```
      AwardBIOS Flash Utility for ASUS V1.14
  (C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  M2N32SLI.bin
                   Flashing Complete
               Press <F1> to Continue

 ⬜ Write OK        🟦 No Update        🟥 Write Fail

  F1 Reset
```

حفظ ملف BIOS الحالي

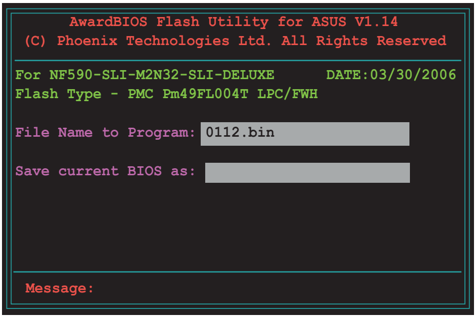
يمكنك استخدام أداة AwardBIOS Flash Utility لحفظ ملف BIOS الحالي. كما يمكنك تحميل ملف BIOS الحالي عند تلف ملف BIOS أثناء عملية النسخ.

تأكد من وجود مساحة خالية على القرص المرن أو القرص المدمج أو قرص فلاش USB لحفظ الملف.

لحفظ ملف BIOS الحالي باستخدام أداة AwardBIOS Flash Utility:

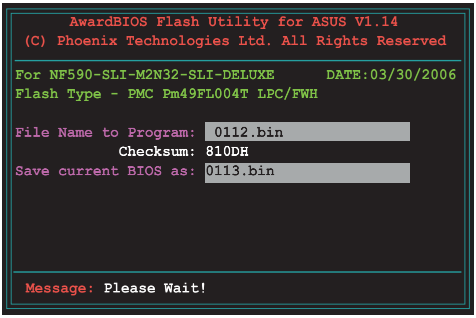
١- اتبع الخطوات من ١ إلى ٦ من القسم السابق.

٢- اضغط على <Y> عندما تطلب الأداة المساعدة حفظ ملف BIOS الحالي. تظهر الشاشة التالية.



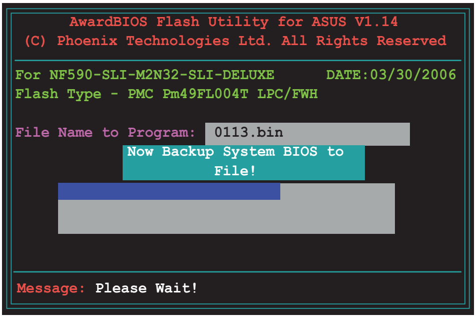
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 0112.bin

Save current BIOS as:

Message:
```

٣- اكتب اسماً لملف BIOS الحالي داخل حقل Save current BIOS (حفظ ملف BIOS الحالي)، ثم اضغط على <Enter> (إدخال).



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0112.bin
            Checksum: 810DH
Save current BIOS as: 0113.bin

Message: Please Wait!
```

٤- تقوم الأداة المساعدة بحفظ ملف BIOS على القرص ثم تعود إلى عملية النسخ في BIOS.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE       DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:  0113.bin
               Now Backup System BIOS to
                         File!

Message: Please Wait!
```

٣-٢ الأداة المساعدة ASUS Update

الأداة المساعدة SUS Update هي أداة تمكنك من إدارة وحفظ وتحديث اللوحة الأم BIOS في بيئة ®Windows. حيث تتيح لك الأداة المساعدة ASUS Update:

- حفظ ملف BIOS الحالي
- تنزيل أحدث ملف BIOS من شبكة الإنترنت
- تحديث BIOS من ملف BIOS مُحدَّث
- تحديث BIOS مباشرة من شبكة الإنترنت
- عرض المعلومات حول إصدار BIOS.

هذه الأداة المساعدة متوفرة على قرص DVD المرفق بعبوة اللوحة الأم.

تتطلب أداة ASUS Update الاتصال بالإنترنت إما من خلال شبكة اتصال أو مزود خدمة الإنترنت (ISP).

تثبيت الأداة المساعدة ASUS Update

لتثبيت الأداة المساعدة ASUS Update:

١- ضع قرص DVD في محرك الأقراص الضوئية. تظهر قائمة برامج التشغيل.

٢. من قائمة **Main (رئيسي)**، انقر فوق علامة التبويب **Utilities (الأدوات)**، ثم انقر فوق **Install ASUS Update VX.XX.XX (تثبيت تحديث ASUS VX.XX.XX)**.

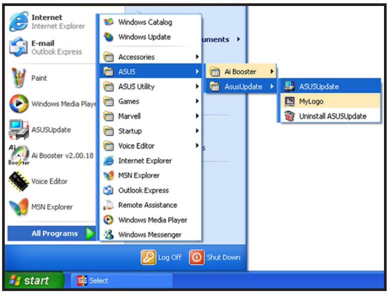
٣- يتم نسخ الأداة المساعدة ASUS Update إلى نظامك.

تحديث BIOS عبر الإنترنت

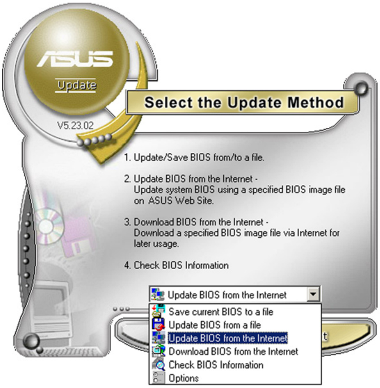
قم بإنهاء كافة تطبيقات ®Windows قبل تحديث BIOS مستخدماً هذه الأداة.

لتحديث BIOS عبر الإنترنت:

١- قم بتشغيل الأداة المساعدة من سطح مكتب نظام ®Windows بالنقر على **Start (بدء) < Programs (برامج) < ASUS < ASUSUpdate < ASUSUpdate**. تظهر النافذة الرئيسية للأداة المساعدة ASUS Update.

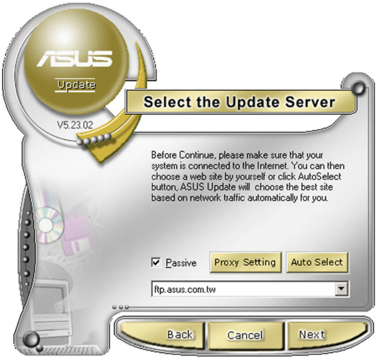

Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

٢. حدد **Update BIOS from the Internet (تحديث BIOS من الإنترنت)** من القائمة المنسدلة، ثم انقر فوق **Next (التالي)**.


ASUS
Update
V5.23.02
Select the Update Method
Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

٣- اختر موقع ASUS FTP الأقرب إليك لتفادي حركة الاتصالات على الشبكة أو انقر فوق **Auto Select (تحديد تلقائي)**. انقر فوق **Next (التالي)**.

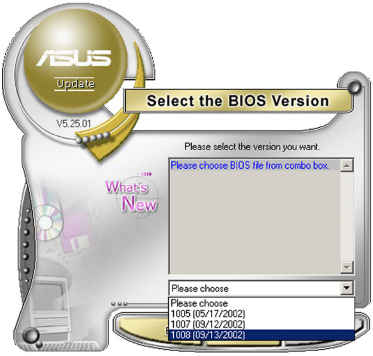

ASUS
Update
V5.23.02
Select the Update Server
☑ Passive
Proxy Setting
Auto Select
Back
Cancel
Next

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

ftp.asus.com.tw

٤- من موقع FTP، اختر إصدار BIOS الذي ترغب في تنزيله. انقر فوق **Next (التالي)**.

٥- اتبع التعليمات التي تظهر على الشاشة لإتمام عملية التحديث.


ASUS
Update
V5.25.01
Select the BIOS Version
What's New
Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

Please select the version you want.

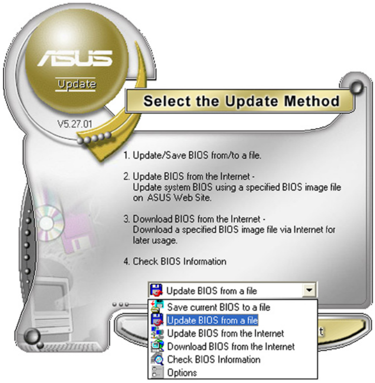
Please choose BIOS file from combo box.

الأداة المساعدة ASUS Update قادرة على تحديث نفسها عبر الإنترنت. قم دائما بتحديث الأداة المساعدة للاستفادة من كافة مميزاتها.

تحديث BIOS من خلال أحد ملفات BIOS.

لتحديث BIOS عبر أحد ملفات BIOS:

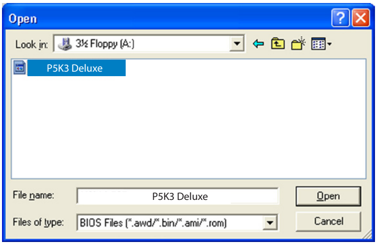
١- قم بتشغيل الأداة المساعدة ASUS Update من سطح مكتب نظام Windows® بالنقر على **Start (بدء) < ASUSUpdate < ASUSUpdate < ASUS < Programs**. تظهر النافذة الرئيسية لـبرنامج ASUS Update.



1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

ASUS
Update
V5.27.01
Select the Update Method
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

٢. حدد **Update BIOS from a file (تحديث BIOS من ملف)** بالقائمة المنسدلة، ثم انقر فوق **Next (التالي)**.



Look in: 3½ Floppy (A:)

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

Open
P5K3 Deluxe
Open
Cancel

٣- حدد ملف BIOS من النافذة المفتوحة، ثم انقر فوق **Open (فتح)**.

٤- اتبع التعليمات التي تظهر على الشاشة لإتمام عملية التحديث.

تأكد من تحميل الإعدادات الافتراضية لنظام الإدخال/الإخراج الأساسي (BIOS) لضمان توافق النظام وثباته. حدد العنصر **Load Setup Defaults (تحميل قيم الإعداد الافتراضية)** من القائمة **Exit (خروج)**.

---

٢ ـ ٤ برنامج تحديث ASUS BIOS

يتيح لك برنامج تحديث ASUS BIOS تحديث ملف BIOS في بيئة DOS. تتيح لك الأداة المساعدة هذه نسخ ملف BIOS الحالي الذي يمكنك استخدامه كنسخة احتياطية في حالة فشل ملف BIOS أو تلفه أثناء عملية التحديث.

تخصص شاشات الأداة المساعدة التالية للغرض المرجعي فقط. قد لا تكون شاشة الأداة المساعدة الفعلية مشابهة للصورة المعروضة هنا.

قبل تحديث BIOS

١. جهز DVD دعم اللوحة الأم ومحرك فلاش USB بتنسيق FAT32/16 وجزء فردي من القرص الصلب.

٢. نزل أحدث ملف BIOS وبرنامج تحديث BIOS من موقع الويب الخاص بشركة ASUS على العنوان http://support.asus.com واحفظهم على محرك فلاش USB.

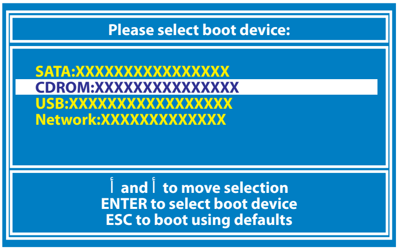
- لا تدعم صيغة NTFS في بيئة DOS. لا تحفظ ملف BIOS وبرنامج تحديث BIOS على محرك القرص الصلب أو محرك فلاش USB بتنسيق NTFS.
- لا تحفظ ملف BIOS على قرص مرن نظرًا لصغر مساحته التخزينية.

٣. قم بإيقاف تشغيل جهاز الكمبيوتر وقم بفصل جميع محركات القرص الصلب من نوع SATA (اختياري).

شغل النظام في بيئة DOS

١. أدخل محرك فلاش USB به آخر إصدار من ملف BIOS وبرنامج تحديث BIOS بمنفذ USB.

٢. شغل جهاز الكمبيوتر. عند ظهور ASUS Logo (شعار ASUS)، اضغط على <F8> لعرض **BIOS Boot Device Select Menu (قائمة تحديد محرك تشغيل BIOS)**. أدخل DVD الدعم في المحرك البصري وحدد المحرك البصري بصفته محرك التشغيل.



Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

أ and أ to move selection
ENTER to select boot device
ESC to boot using defaults

٣. عند ظهور قائمة **Make Disk (إنشاء قرص)**، حدد عنصر **FreeDOS command prompt (مطالبة أمر FreeDOS)** عن طريق الضغط على رقم العنصر.

٤. عند مطالبة FreeDOS، اكتب **d:** واضغط <Enter> (إدخال) لتحويل القرص من المحرك C (محرك بصري) إلى المحرك D (محرك فلاش USB).

```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

عمل نسخة احتياطية من ملف BIOS الحالي

لعمل نسخة احتياطية من ملف BIOS الحالي باستخدام برنامج تحديث BIOS

تأكد من أن محرك فلاش USB غير محمي ضد الكتابة وأن به مساحة كافية على الأقل لحفظ الملف.

١. عند مطالبة FreeDOS، اكتب **bupdater /o[filename]** واضغط <Enter> (إدخال).

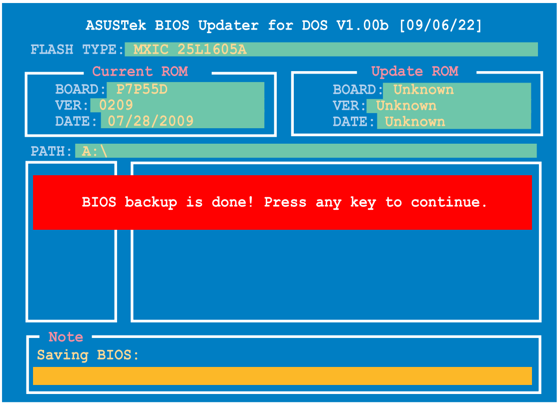
```
D:\>bupdater /oOLDBIOS1.rom
```

الامتداد

اسم الملف

تعد خانة [filename] [اسم الملف] هي أي اسم ملف محدد من قبل المستخدم لا يزيد عن ثمانية رموز أبجدية عددية بالنسبة لاسم الملف الرئيسي وثلاثة رموز أبجدية عددية بالنسبة لاسم الامتداد.

٢. تظهر شاشة النسخة الاحتياطية لبرنامج تحديث BIOS لتشير إلى عملية إنشاء نسخة احتياطية لـ BIOS. عندما يتم الانتهاء من عمل نسخة احتياطية لـ BIOS، اضغط على أي مفتاح للعودة لمطالبة DOS.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
       Current ROM                    Update ROM
   BOARD: P7P55D               BOARD: Unknown
   VER: 0209                   VER: Unknown
   DATE: 07/28/2009            DATE: Unknown
PATH: A:\

        BIOS backup is done! Press any key to continue.

  Note
 Saving BIOS:
```

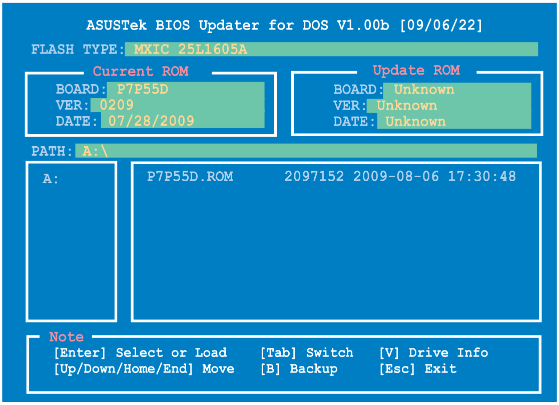
تحديث ملف BIOS

لتحديث ملف BIOS باستخدام برنامج تحديث BIOS

١. عند مطالبة FreeDOS، اكتب **bupdater /pc /g** واضغط <Enter> (إدخال).

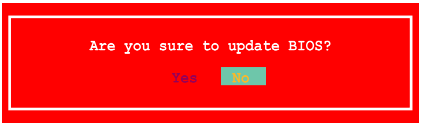
```
D:\>bupdater /pc /g
```

٢. تظهر شاشة برنامج تحديث BIOS كما هو موضح أدناه.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
 Current ROM                      Update ROM
 BOARD: P7P55D                    BOARD: Unknown
 VER: 0209                        VER: Unknown
 DATE: 07/28/2009                 DATE: Unknown
PATH: A:\
 A:        P7P55D.ROM       2097152 2009-08-06 17:30:48

 Note
 [Enter] Select or Load      [Tab] Switch    [V] Drive Info
 [Up/Down/Home/End] Move     [B] Backup      [Esc] Exit
```

٣. اضغط <Tab> للتنقل بين الخانات الموجودة بالشاشة واستخدم مفاتيح <Up/Down/Home/End> لتحديد ملف BIOS واضغط <Enter> (إدخال). يختر برنامج تحديث BIOS ملف BIOS المحدد ويطلب منك تأكيد عملية تحديث BIOS.



```
Are you sure to update BIOS?
        Yes    No
```

٤. حدد **Yes (نعم)** واضغط <Enter> (إدخال). عندما تتم عملية تحديث BIOS، اضغط <ESC> (إلغاء) للخروج من برنامج تحديث BIOS. قم بإعادة تشغيل جهاز الكمبيوتر.

لا تقم بإيقاف تشغيل أو إعادة تشغيل النظام أثناء عملية تحديث BIOS لكي تمنع فشل تمهيد النظام!

- بالنسبة لإصدار برنامج تحديث BIOS رقم ١,٠٤ أو الأعلى من ذلك، يقوم النظام تلقائيًا بالخروج من شاشة استعداد DOS بعد تحديث BIOS.
- احرص على تحميل الإعدادات الافتراضية لـ BIOS لضمان ثبات وتوافق النظام. حدد عنصر **Load Setup Defaults (حمل الإعدادات الافتراضية)** الموجود في قائمة BIOS **Exit (الخروج من** BIOS). راجع الفصل ٣ الموجود في دليل مستخدم اللوحة الأم لمزيد من التفاصيل.
- تأكد من توصيل كافة محركات الأقراص الصلبة من نوع SATA بعد تحديث ملف BIOS إذا كنت قد قمت بفصلها.

الفصل الثالث: استكشاف الأعطال وإصلاحها

٣-١ استكشاف أعطال اللوحة الأم Motherboard DIY وإصلاحها

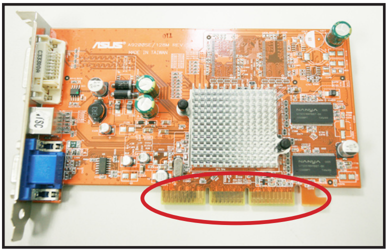
بعد تجميع الكمبيوتر الخاص بك، قد تواجهك بعض المشكلات عند بدء تشغيله. يقدم هذا الفصل إجابات على بعض الأسئلة الشائعة بشأن الكمبيوتر الشخصي قبل الدخول إلى نظام التشغيل. اقرأ هذا الفصل للتعرف على أساسيات استكشاف الأعطال وإصلاحها؟ فذلك يوفر الوقت والجهد المبذولين للاتصال بفريق الدعم الفني لشركة ASUS أو إعادة المنتج إلى خدمة الضمان.

٣-١-١ أساسيات استكشاف الأعطال وإصلاحها

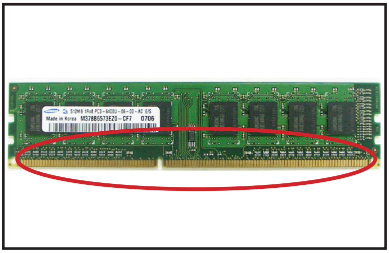
أ- التوصيل الخاطئ

١- تأكد من عدم وجود عوائق على طرف التوصيل الذهبي أو الدبابيس.

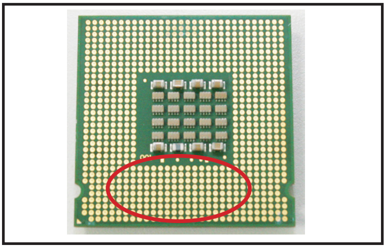
٢- استخدم قطعة قطن أو ممحاة لحك طرف التوصيل الذهبي برفق. تذكر تنظيف فتات الممحاة.



طرف التوصيل الذهبي لبطاقة VGA



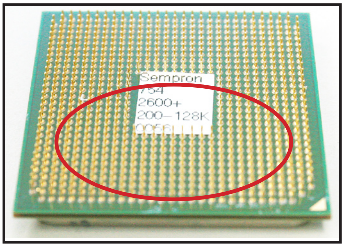
أطراف التوصيل الذهبية لوحدات ذاكرة DIMM



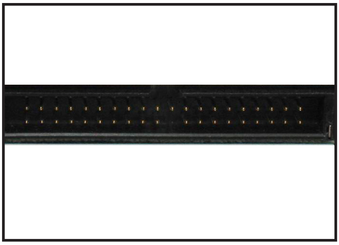
طرف التوصيل الذهبي لمعالج LGA775

امسك البطاقة أو وحدة المعالجة المركزية من حافتيها ولا تلمس أطراف التوصيل الذهبية؟ علماً بأن الكهرباء الاستاتيكية تلحق أضراراً جسيمة بالجهاز.

٣- تأكد من عدم كسر أو التواء دبابيس الموصل أو وحدة المعالجة المركزية CPU. قد يتسبب الدبوس الملتوي أو المكسور في حدوث خلل بهذا المكون. اتصل بالبائع للحصول على مزيد من الدعم.



الدبابيس الذهبية لوحدة المعالجة المركزية AMD

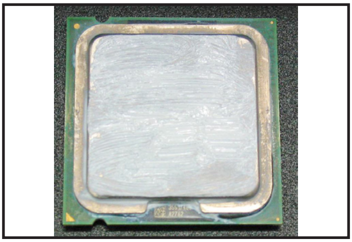


دبابيس الموصل

في حالة تعرض الدبابيس للكسر أو الالتواء بعد الشراء، فقد يطالبك البائع بدفع نفقات التصليح. وفي بعض الأحيان تكون الدبابيس المكسورة أو الملتوية غير قابلة للتصليح.

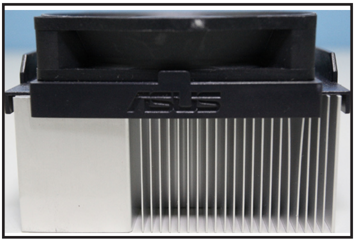
ب- شدة ارتفاع حرارة وحدة المعالجة المركزية

١- امسح سطح وحدة المعالجة المركزية بقطعة قماش نظيفة. قم بإسقاط عدة قطرات من المعجون الحراري على المنطقة المكشوفة من وحدة المعالجة المركزية التي يتصل بها المشتت الحراري. تأكد من انتشار هذه القطرات في شكل طبقة رقيقة متساوية.

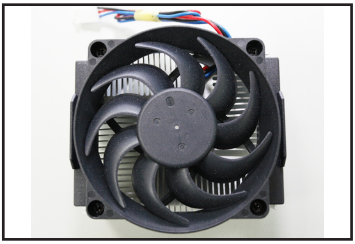


سطح وحدة المعالجة المركزية

٢- تأكد من عدم وجود عوائق بالمشتت الحراري والمروحة.



منظر علوي للمشتت الحراري والمروحة



منظر جانبي للمشتت الحراري والمروحة

٣- اتبع تعليمات الجهة المصنعة للمشتت الحراري والمروحة عند تنظيف العوائق التي تقلل من سرعة دوران المروحة.

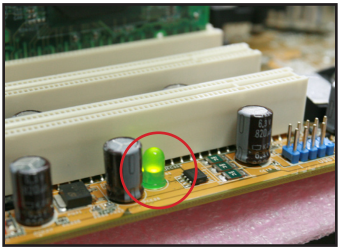
٣-٢ مشكلات أخرى شائعة

- عند فك بعض القطع من الجهاز وإزالتها، تأكد من فصل كافة كبلات الطاقة.
- يتم عرض كافة رسائل الخطأ على الشاشة خلال عملية اختبار التشغيل الذاتي (POST).
- في حالة صدور صفير من BIOS، يرجى الرجوع إلى القسم ١-١١ لمزيد من التفاصيل.
- تفحص القائمة التفقدية الواردة أدناه لمزيد من التأكد.

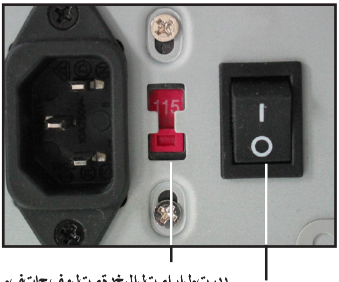
	مؤشر الطاقة	العرض على الشاشة	المشتت الحراري والمروحة	صفير BIOS	رسالة الخطأ	صفحات المرجع
عدم وصول الطاقة للجهاز	إيقاف	لا	توقف	لا	غير متاح	٣-٤
عدم ظهور شيء على الشاشة	تشغيل	لا	توقف	لا	غير متاح	٣-٥
	تشغيل	لا	قيد التشغيل	لا	غير متاح	٣-٥
	تشغيل	لا	قيد التشغيل	نعم	غير متاح	٣-٥
تعذر الدخول إلى نظام التشغيل	تشغيل	نعم	قيد التشغيل	نعم	نعم	٣-٥
	تشغيل	نعم	قيد التشغيل	لا	نعم	٣-٥
	تشغيل	نعم	قيد التشغيل	لا	لا	٣-٥

إذا تم إصلاح المشكلة وظهرت مشكلة جديدة، يرجى تفحص القائمة التفقدية ثانيةً. وفي حالة استمرار المشكلة، يرجى الاتصال بالبائع أو فريق الدعم الفني لشركة ASUS لمزيد من المساعدة.

٣-٢-١ عدم وصول الطاقة للجهاز

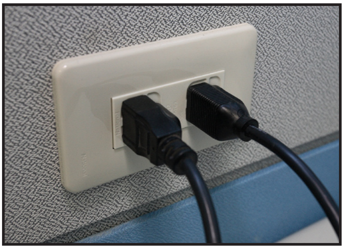


تُزوَّد اللوحات الأم من شركة ASUS بلمبة بيان لوضع الاستعداد. وعندما تضيء اللمبة فإنها تدل على أن النظام قيد التشغيل. وفي حالة عدم إضاءة اللمبة، يرجى اتباع التعليمات الواردة أدناه لإصلاح المشكلة.



١- تأكد من ضبط وحدة الإمداد بالطاقة على فولتية دخل التيار المتردد الصحيحة بمنطقتك، وتأكد من تشغيل وحدة الإمداد بالطاقة.

- قبل ضبط فولتية التيار المتردد، تأكد من فصل قابس التيار، فالإخفاق في القيام بذلك يلحق أضراراً جسيمة بوحدة الإمداد بالطاقة.
- الإخفاق في ضبط فولتية التيار المتردد يؤدي إلى إلحاق أضرار جسيمة بالنظام.



٢- تأكد من توصيل سلك الطاقة بمأخذ التيار الموجود بالحائط.

- وصل قابس الطاقة مباشرة بمأخذ التيار الموجود بالحائط. لا توصل قابس الطاقة بوصلة إطالة أو مزود الطاقة غير المنقطع (UPS) أو أجهزة أخرى.
- قم بتبديل قابس الطاقة للنظام والشاشة لتتحقق من عمل مأخذ التيار بالحائط على نحو طبيعي.

٣- في حالة استمرار المشكلة، اتصل بالبائع للحصول على وحدة جديدة للإمداد بالطاقة. وفي حالة تشغيل وحدة الطاقة، يرجى الاتصال ببائع اللوحة الأم التابعة لشركة ASUS للحصول على خدمة ضمان اللوحة الأم.

٣-٢-٢ تعذر التمهيد: عدم ظهور شيء على الشاشة

غالباً ما يرجع السبب في تعذر التمهيد وعدم ظهور شيء على الشاشة إلى خلل في الجهاز أو خطأ في التركيب. يرجى اتباع التعليمات الواردة أدناه لإصلاح المشكلة.

١- تأكد من توصيل كافة كبلات الطاقة،بما في ذلك كبلات النظام والشاشة.

٢- تأكد مما إذا كانت المشكلة ناتجة من أجهزة التوسعة.

- قم بإزالة كافة بطاقات وأجهزة التوسعة. استخدم فقط اللوحة الأم والشاشة وبطاقة VGA ووحدات الذاكرة ووحدة الإمداد بالطاقة والمشتت الحراري والمروحة ولوحة المفاتيح والماوس لإعادة تمهيد النظام.

- إذا كان النظام يعمل بصورة طبيعية، فهذا يعني أن أحد أجهزة التوسعة هو المتسبب في المشكلة. أعد تركيب أجهزة التوسع التي أزلتها إلى النظام واحداً تلو الآخر واكتشف الجهاز المعيب.

٣- تأكد مما إذا كانت المشكلة ناتجة من أجهزة النظام الأساسية.

- إذا كان لديك بعض الأجهزة الاحتياطية، فيمكنك استبدال الأجهزة لاكتشاف الجهاز المعيب بالترتيب التالي "وحدة الذاكرة، وحدة المعالجة المركزية، اللوحة الأم، القرص الثابت/محرك الأقراص الضوئية، لوحة المفاتيح/الماوس".

عند اكتشاف الجهاز المعيب، يرجى الاتصال بالبائع للحصول على الخدمة اللازمة.

٣-٢-٣ تعذر الدخول إلى نظام التشغيل

١- في حالة ظهور المشكلة بعد إضافة أحد الأجهزة، قم بإزالة الجهاز الجديد المضاف وإعادة تمهيد النظام. وإذا كان النظام يعمل بصورة طبيعية بدون الجهاز، فقد يكون هذا الجهاز معيبا أو غير متوافق مع النظام. لذا يرجى الاتصال بالبائع لطلب المساعدة.

٢- إذا ظهرت المشكلة بعد تثبيت برامج أو برنامج تشغيل، فيرجى اتباع التعليمات التالية لإصلاح المشكلة.

أ- اجعل نظام التشغيل في وضع الأمان وقم بإزالة البرامج أو برنامج التشغيل.

ب- اتصل بجهة تصنيع نظام التشغيل لمزيد من الدعم.

ج- في حالة عدم جدوى التعليمات السابقة في إصلاح المشكلة، فقد تحتاج إلي تهيئة محرك القرص الثابت وإعادة تثبيت نظام تشغيل جديد.

٣- وإذا ظهرت المشكلة بعد تغيير إعدادات BIOS، قم بالتمهيد والدخول إلى BIOS لتحميل الإعدادات الافتراضية. راجع دليل المستخدم للحصول على مزيد من التفاصيل.

٤- إذا كان سبب المشكلة هو الإصابة بفيروس أو تلف الملفات، يرجى عمل التالي لإصلاح المشكلة.

أ- اجعل نظام التشغيل في وضع الأمان وقم بعمل مسح كامل للنظام لاكتشاف الفيروسات مستخدماً أحد برامج مكافحة الفيروسات.

ب- اتصل بجهة تصنيع نظام التشغيل لمزيد من الدعم.

ج- في حالة عدم جدوى التعليمات السابقة في إصلاح المشكلة، فقد تحتاج إلي تهيئة محرك القرص الثابت وإعادة تثبيت نظام تشغيل جديد.

٣-٢-٤ الأسئلة الشائعة

س١: تختلف الذاكرة الظاهرة أثناء POST (اختبار التشغيل الذاتي) عن تلك المركبة في الجهاز.

ج١: قد ينشأ الاختلاف في تحديد الذاكرة عن عيب في وحداتها أو عن خطأ في تركيب وحدات DIMM. تأكد من كون وحدات DIMM في حالة جيدة وتركيبها تركيباً صحيحاً. راجع دليل المستخدم للحصول على مزيد من التفاصيل. في حالة تركيب وحدات ذاكرة بحجم ٤ جيجا بايت وظهرت على أنها ٣ جيجا بيت، فهذا أمر طبيعي.

س٢ لم يتعرف نظام التشغيل على محرك الأقراص المرنة رغم إضاءة لمبة القرص المرن.

ج٢ تم تركيب كبلات القرص المرن بصورة خاطئة. تأكد من أن الخط الأحمر على الكبل (طرف الدبوس١) متوافق مع الدبوس١ الموجود في محرك القرص المرن.

س٣: تعذر دخول نظام تشغيل بعد تركيب ذاكرة فلاش USB أو محرك قرص ثابت خارجي.

ج٣: عندما يتعرف النظام على ذاكرة فلاش USB أو أقراص صلبة بواجهة USB، فقد تتغير أولوية تمهيد الجهاز. قم بإزالة أجهزة USB وأعد تشغيل النظام.

س٤: عند تثبيت نظام Windows XP، قد يخفق في تحديد محركات الأقراص الصلبة المركبة في جهاز التحكم RAID.

ج٤: لا يحتوي نظام Windows XP على برنامج تشغيل جهاز التحكم RAID، ولذا لا يتم التعرف على محركات الأقراص الصلبة. قم بنسخ جهاز التحكم RAID على قرص مرن، وعند تمهيد النظام بقرص Windows XP؟ اضغط على <F6> لقراءة برنامج التشغيل من القرص المرن. راجع دليل المستخدم للحصول على مزيد من التفاصيل.

الفصل الرابع: نصائح للعناية بالكمبيوتر

٤-١ العناية الصحيحة بالكمبيوتر الشخصي

الكمبيوتر الشخصي كأي جهاز منزلي آخر، فاحرص على إبعاده عن الرطوبة وأشعة الشمس المباشرة ومصادر الكهرباء الاستاتيكية. ينبغي عدم نقل الكمبيوتر أثناء التشغيل في حالة التلف. تؤثر الأتربة الداخلية على تشغيل محرك الأقراص كما أن لها دورها في ارتفاع درجة الحرارة التي تتسبب في تلف جهاز الكمبيوتر أو المكونات.

٤-٢ المعرفة الأساسية

١- احرص على تغطية الكمبيوتر بغطاء واقٍ من الأتربة عند عدم استخدامه.

٢- لا تضع أي شيء على شاشة عند استخدام الكمبيوتر حتى تسد فتحات التهوية، فالحرارة الزائدة تؤدي إلى حدوث خلل بالشاشة.

٣- تجنب ملاصقة الكمبيوتر للحائط واترك مسافة كافية لتبديد الحرارة؟ فالحرارة الزائدة كفيلة بإتلاف النظام.

٤- احرص على وضع الجهاز فوق سطح ثابت.

٥- احرص على إبعاد الكمبيوتر عن المناطق التي ترتفع بها درجة الحرارة، علماً بأن أفضل الأجواء لتشغيل الجهاز تتراوح درجة حرارتها بين ٥ و٣٠ درجة مئوية. استخدم جهاز تكييف أو مروحة كهربية لتبديد الحرارة بصورة أفضل.

٦- رتب الكبلات الشريطية بإحكام حتى لا يقل تدفق الهواء عن المستوى المناسب.

٤-٣ معرفة الاستخدام

١- قم بتشغيل وإيقاف الكمبيوتر بانتظام. في حالة تشغيل الكمبيوتر لمدة طويلة، ينصح باستخدام مروحة وحدة معالجة مركزية/نظام ذات أداء مرتفع ووحدة إمداد بالطاقة عالية الفولتية.

٢- الانقطاع المفاجئ للطاقة قد يؤدى إلى تلف محرك الأقراص الثابتة. وعندما تكون وحدة الإمداد بالطاقة غير ثابتة، يوصى بتوصيل الكمبيوتر بمزود الطاقة غير المنقطع.

٣- أعد ترتيب ملفات البيانات والكشف عن الفيروسات وتحديث الرموز الخاصة بها وإلغاء تجزئة القرص بشكل منتظم.

٤- قم بمسح وتنظيف الغبار عن جهاز الكمبيوتر بانتظام. (احرص على فصل كافة كبلات الطاقة قبل التنظيف)

- أزل تركيب اللوحة الأم ومحرك الأقراص الثابتة/محرك الأقراص الضوئية، ثم نظفها باستخدام بخاخ هواء أو فرشاة ناعمة.

- أزل الأتربة والشعر المتجمع حول وحدة الإمداد بالطاقة باستخدام مكنسة مضادة للكهرباء الاستاتيكية.

٤-٤ إرشادات

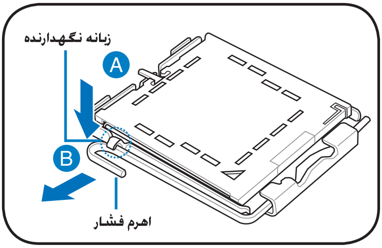
١- في حالة عدم استخدام الكمبيوتر لمدة طويلة، ينصح بوضع مجفف رطوبة في الهيكل لتفادي حدوث تلف بسبب الرطوبة.

٢- في بعض المناطق التي ترتفع فيها درجة الحرارة والرطوبة، ينصح بتشغيل جهاز الكمبيوتر مرة كل أسبوعين. فهذا يساعد على تفادي الأضرار الناجمة عن الرطوبة.

بخش ۱: شروع سریع

۱-۱ نصب CPU

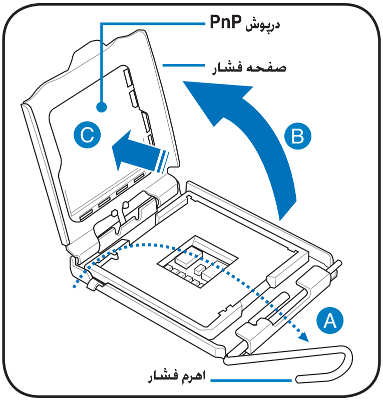
۱-۱-۱ سوکت LGA775 اینتل


زبانه نگهدارنده
A
B
اهرم فشار

۱- سوکت CPU را درروي مادربرد قرار دهید.

۲. اهرم فشار را با انگشت شست خود فشار دهید (A). سپس آن را به سمت چپ حرکت دهید (B) تا از زبانه نگهدارنده آزاد شود.

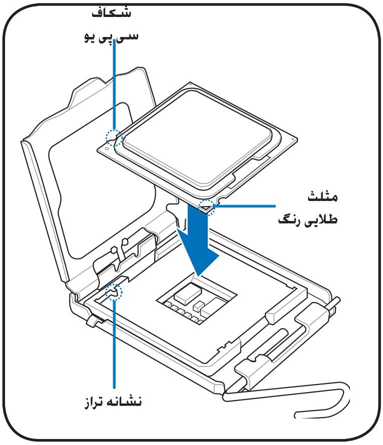
برای جلوگیری از آسیب دیدن پین های سوکت. تا زمان نصب سی پی یو. درپوش PnP را جدا نکنید.


درپوش PnP
صفحه فشار
C
B
A
اهرم فشار

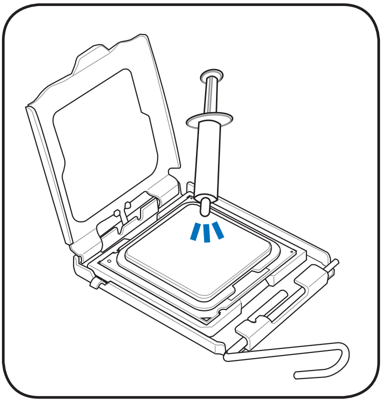
۳. اهرم فشار را در جهت فلش تا زاویه ۱۳۵ درجه بلند کنید.

۴. صفحه بار را با انگشت شست و اشاره خود تا زاویه ۱۰۰° بالا بیاورید (۴A)، سپس پوشش PnP را از روی صفحه بار فشار دهید تا جدا شود (۴B).

۵. سی پی یو را بالای سوکت قرار دهید و مطمئن شوید که مثلث طلایی رنگ روی گوشه سمت چپ پایین سوکت قرار گرفته است. سپس نشانه تراز را در شکاف سی پی یو قرار دهید.

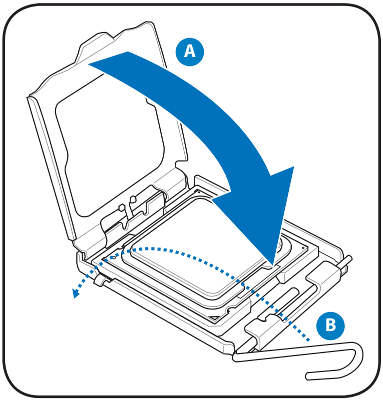


۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.



برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.

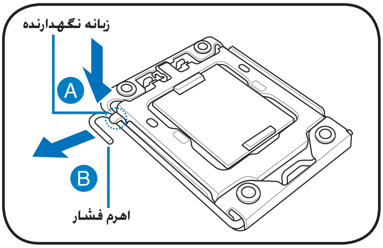


۷. صفحه فشار را ببندید (A)، سپس اهرم فشار را فشار دهید (B) تا در زبانه نگهدارنده قفل شود.

۱-۱-۲ سوکت Intel® LGA1366

۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

۲. اهرم فشار را با انگشت شست خود فشار دهید (A). سپس آن را به سمت چپ حرکت دهید (B) تا از زبانه نگهدارنده آزاد شود.


زبانه نگهدارنده
A
B
اهرم فشار

برای جلوگیری از آسیب دیدن پین های سوکت، تا زمان نصب سی پی یو، درپوش PnP را جدا نکنید.

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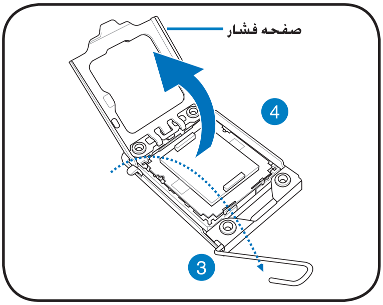
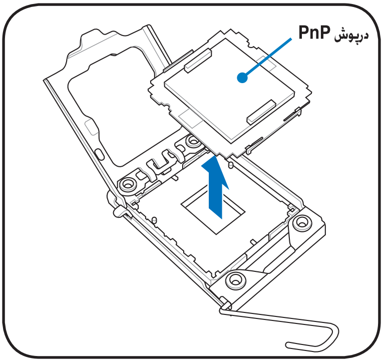
۳. اهرم فشار را در جهت فلش تا زاویه ۱۳۵ درجه بلند کنید.

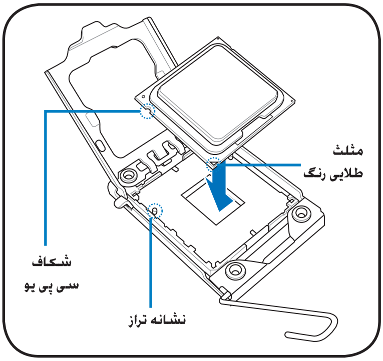
۴. صفحه فشار را با انگشت شست و انگشت اشاره خود تا زاویه ۱۰۰ درجه بلند کنید.


صفحه فشار
4
3

۵. درپوش PnP را از سوکت سی پی یو جدا کنید.

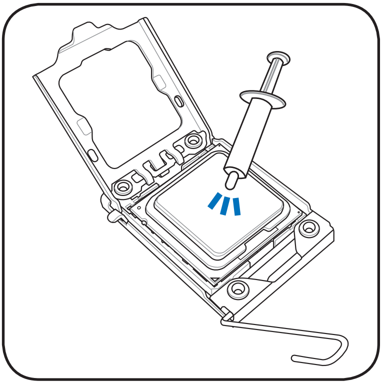


۶. سی پی یو را بالای سوکت قرار دهید و مطمئن شوید که مثلث طلایی رنگ روی گوشه سمت چپ پایین سوکت قرار گرفته است. سپس نشانه تراز را در شکاف سی پی یو قرار دهید.



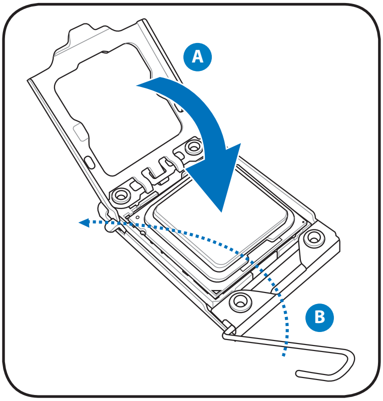
سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!

۷. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.



برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشوویید، و به پزشک متخصص مراجعه کنید.



۸. صفحه فشار را ببندید (A)، سپس اهرم فشار را فشار دهید (B) تا در زبانه نگهدارنده قفل شود.

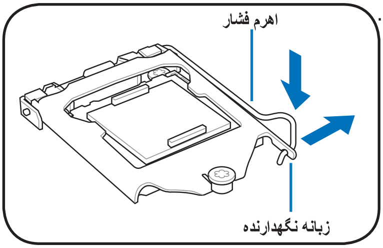
۱ـ۱ـ۳ سوکت Intel® LGA1156

CPU LGA1155 با سوکت LGA1156 ناسازگار است. CPU LGA1155 را روی سوکت LGA1156 نصب نکنید.

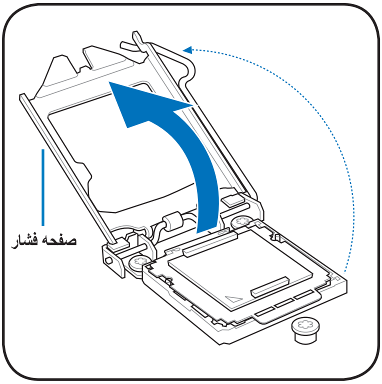
۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

۲. اهرم فشار را با انگشت شست خود فشار دهید (A)، سپس آن را به سمت راست حرکت دهید (B) تا از زبانه نگهدارنده آزاد شود.

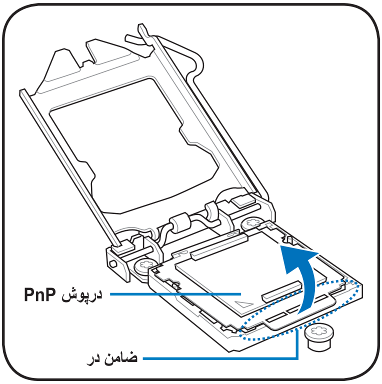
برای جلوگیری از آسیب دیدن پین های سوکت، تا زمان نصب سی پی یو، درپوش PnP را جدا نکنید.



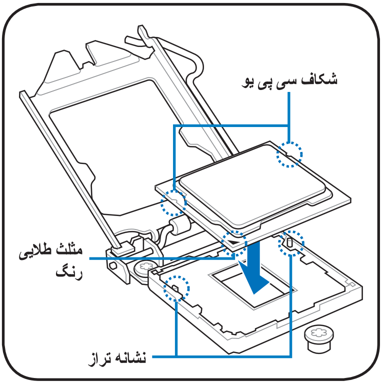
۳. اهرم فشار را در جهت پیکان بلند کنید تا صفحه فشار کاملاً بلند شود.



۴. درپوش PnP را فقط با بلندکردن زبانه از سوکت CPU خارج کنید.

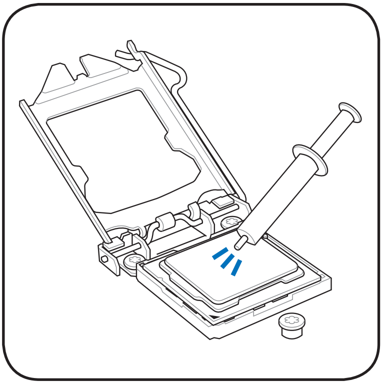


۵. سی پی یو را بالای سوکت قرار دهید، و مطمئن شوید که مثلث طلایی رنگ روی گوشه سمت چپ پایین سوکت قرار گرفته است، سپس نشانه تراز را در شکاف سی پی یو قرار دهید.



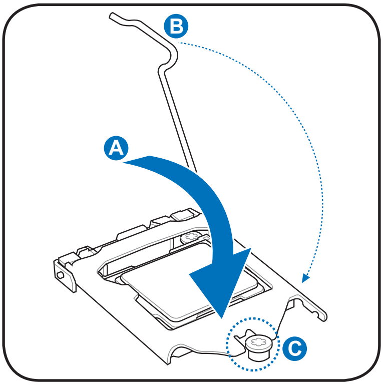
سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!

۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.

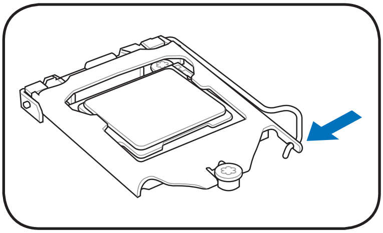


برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.



۷. صفحه فشار را ببندید (A)، و سپس اهرم فشار را به پایین فشار دهید (B)، دقت کنید که لبه جلویی صفحه فشار زیر قفل نگهدارنده بلغزد (C).



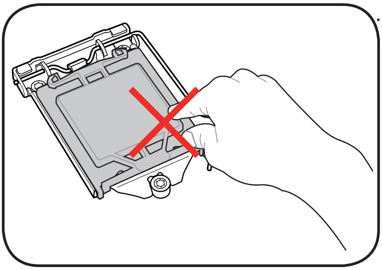
۸. اهرم فشار را زیر زبانه نگهدارنده قرار دهید.

۴-۱-۱ سوکت LGA1155 اینتل (درپوش PnP بر روی صفحه بارگذاری)

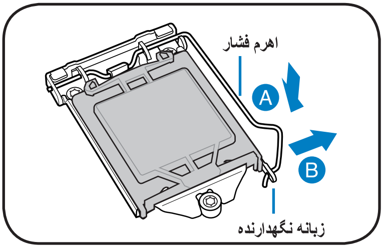
CPU LGA1156 با سوکت LGA1155 ناسازگار است. CPU LGA1156 را روی سوکت LGA1155 نصب نکنید.

۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

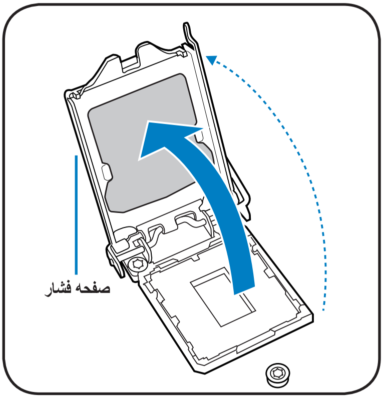
۲. پیش از نصب CPU، درپوش PnP را از روی سوکت CPU برندارید.



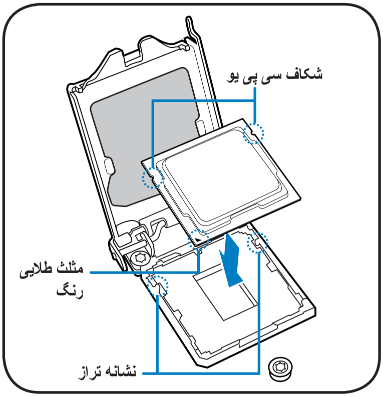
۲. اهرم فشار را با انگشت شست خود فشار دهید (A)، سپس آن را به سمت راست حرکت دهید تا از زبانه نگهدارنده آزاد شود. (B)



۳. اهرم فشار را در جهت پیکان بلند کنید تا صفحه فشار کاملاً بلند شود.

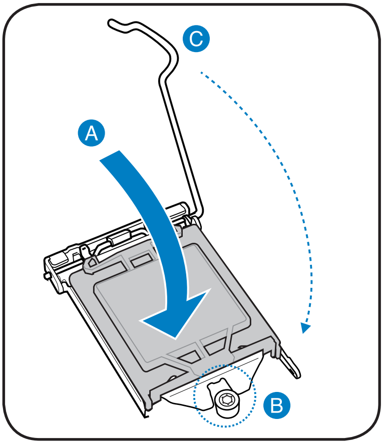


۵. سی پی یو را بالای سوکت قرار دهید، و مطمئن شوید که مثلث طلایی رنگ روی گوشه سمت چپ پایین سوکت قرار گرفته است، سپس نشانه تراز را در شکاف سی پی یو قرار دهید.

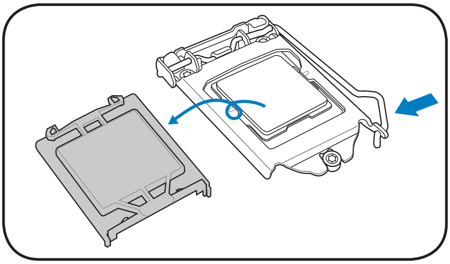


سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!

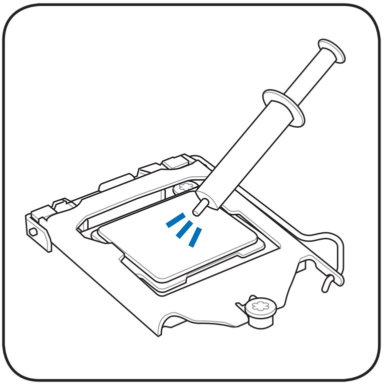
۶. صفحه بارگذاری (A) را ببندید و مطمئن شوید که لبه صفحه بارگذاری زیر قفل نگهدارنده (B) قرار می گیرد. سپس، اهرم بارگذاری (C) را به سمت پایین فشار دهید.



۷. برای برداشتن درپوش PnP از روی سوکت CPU، اهرم بارگذاری را زیر زبانه نگهدارنده جای دهید.



۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.



برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.

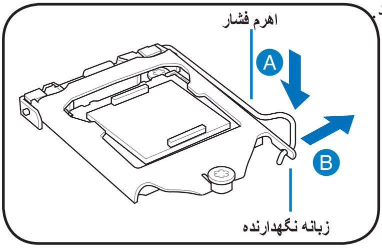
۵-۱-۱ سوکت LGA1155 اینتل (درپوش PnP زیر صفحه بارگذاری)

CPU LGA1156 با سوکت LGA1155 ناسازگار است. CPU LGA1156 را روی سوکت LGA1155 نصب نکنید.

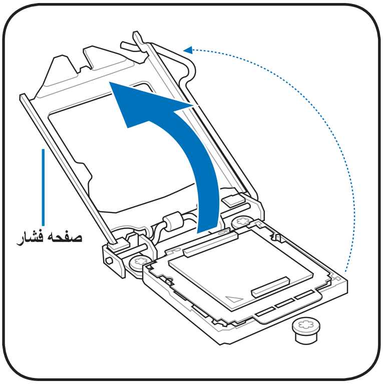
۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

۲. اهرم فشار را با انگشت شست خود فشار دهید (A)، سپس آن را به سمت راست حرکت دهید تا (B) از زبانه نگهدارنده آزاد شود.

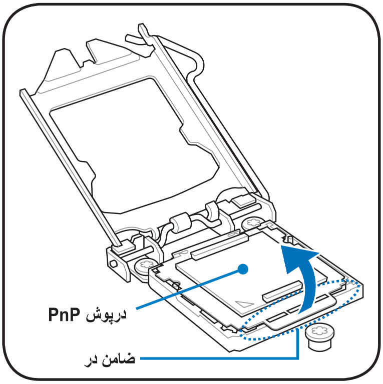
برای جلوگیری از آسیب دیدن پین های سوکت، تا زمان نصب سی پی یو، درپوش PnP را جدا نکنید.



۳. اهرم فشار را در جهت پیکان بلند کنید تا صفحه فشار کاملاً بلند شود.

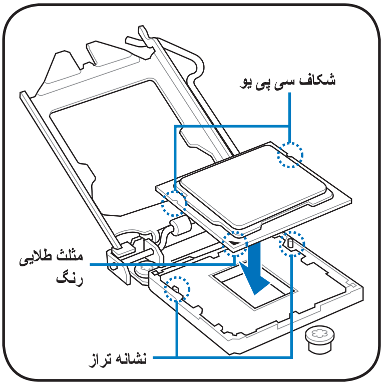


۴. درپوش PnP را فقط با بلندکردن زبانه از سوکت CPU خارج کنید.



۵. سی پی یو را بالای سوکت قرار دهید، و مطمئن شوید که مثلث طلایی رنگ روی گوشه سمت چپ پایین سوکت قرار گرفته است، سپس نشانه تراز را در شکاف سی پی یو قرار دهید.

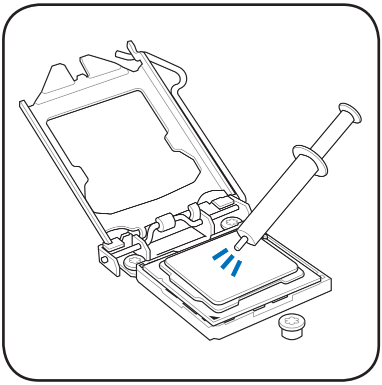
سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!

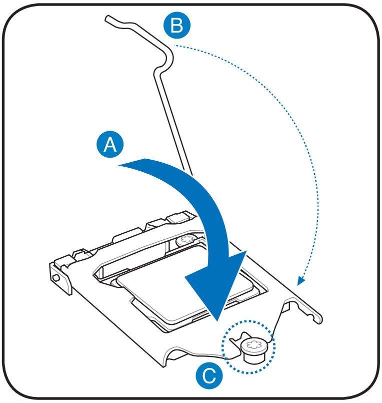


۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.

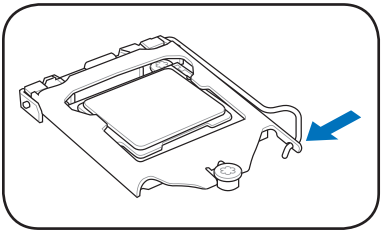
برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.





۷. صفحه فشار را ببندید (A)، و سپس اهرم فشار را به پایین فشار دهید (B)، دقت کنید که لبه جلویی صفحه فشار زیر قفل نگهدارنده بلغزد (C).

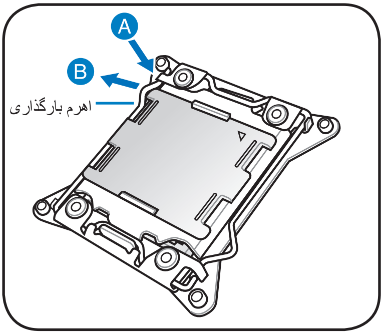


۸. اهرم فشار را زیر زبانه نگهدارنده قرار دهید.

۱,۱,۶ سوکت Intel® LGA2011

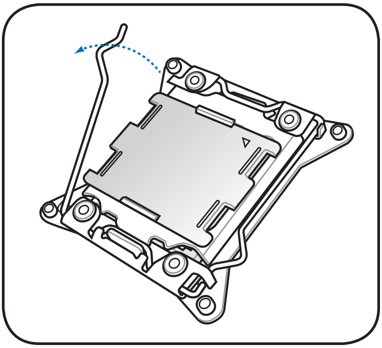
۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا

۲. اهرم فشار را با انگشت شست خود فشار دهید (A). سپس آن را به سمت چپ حرکت دهید (B) تا از زبانه نگهدارنده آزاد شود.

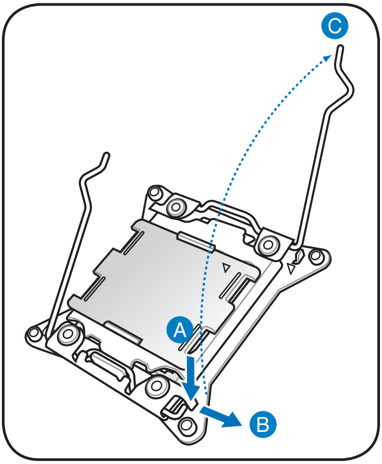


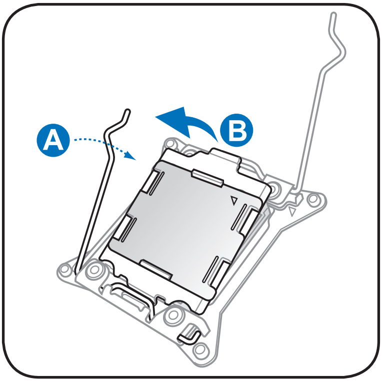
برای جلوگیری از آسیب دیدن پین های سوکت، تا زمان نصب سی پی یو، درپوش PnP را جدا نکنید.

۳- اهرم بارگذاری را در جهت فلش اندکی بلند کنید.

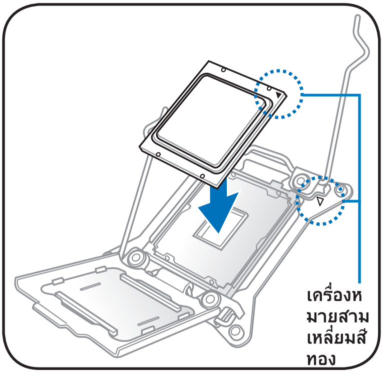


۴- صفحه فشار را ببندید (A)، و سپس اهرم فشار را به پایین فشار دهید (B)، دقت کنید که لبه جلویی صفحه فشار زیر قفل نگهدارنده بلغزد (C).اهرم بارگذاری را در جهت فلش اندکی بلند کنید.



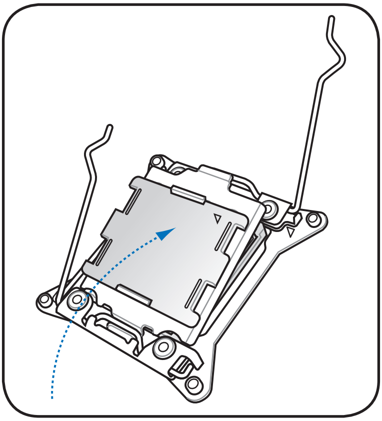


٥. اهرم بارگذاری چپ (A) را برای بلند کردن صفحه بارگذاری (B)، فشار دهید .



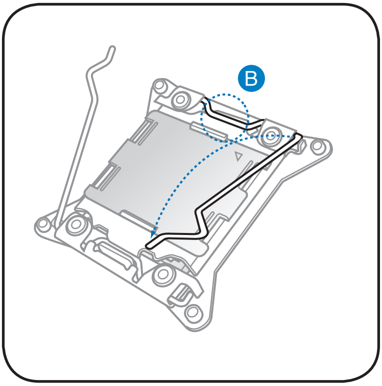
٦. CPU را طوری روی سوکت قرار دهید که علامت مثلثی شکل در گوشه بالای سمت راست سوکت قرار بگیرد.

سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!

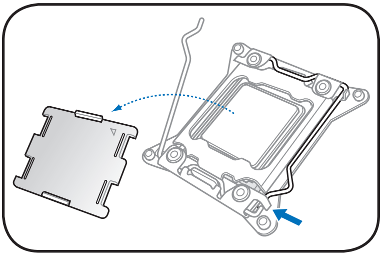


٧. صفحه فشار را ببندید

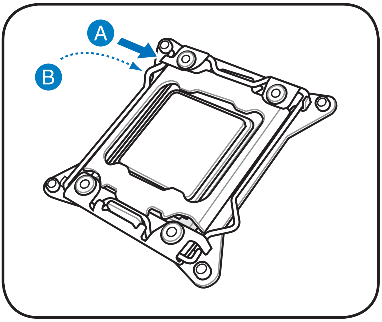
۸- اهرم بارگذاری راست (A) را فشار دهید و دقت کنید که لبه صفحه بارگذاری توسط اهرم محکم شود (B).

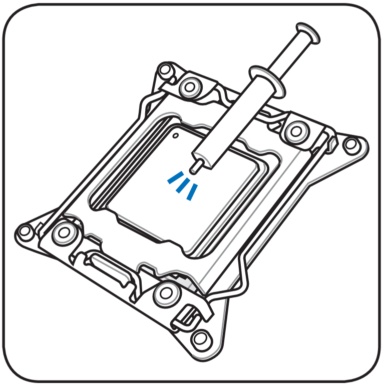


۹- اهرم بارگذاری راست را زیر زبانه نگهداری قرار دهید. درپوش PnP را از سوکت CPU خارج کنید.



۱۰- اهرم بارگذاری چپ (A) را فشار داده و سپس آن را زیر زبانه نگهداری قرار دهید (B).

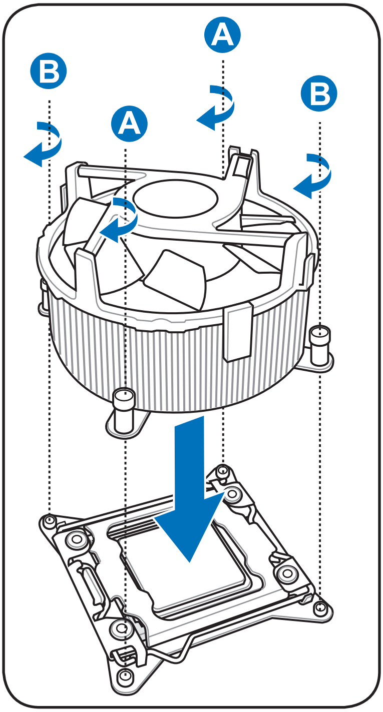




۱۱- مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.

برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

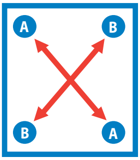
میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.



۱۲- هیت سینک را روی CPU نصب شده قرار دهید و مطمئن شوید که چهار بست با سوراخهای مطابقت دارند.روی سوکت CPU

۱۳- چهار پیچ را با پیچ گوشتی Philips (چهارسو) را فقط تا حدی بپیچانید که هیت سینک به شود. پس از بستن چهار پیچ، آنها را یک به یک محکم کنید تا هیت سینک کاملاً محکم شود.

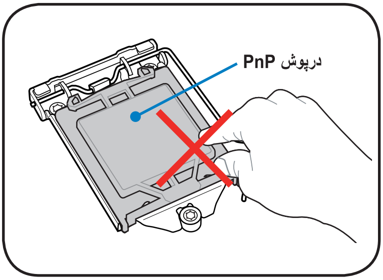
چهار پیچ هیت سینک را به ترتیب قطری محکم کنید.



۱-۱-۷ سوکت LGA1150 اینتل (درپوش PnP بر روی صفحه بارگذاری)

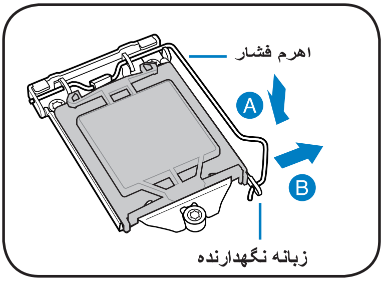
مطمئن شوید که فقط CPU طراحی شده درست را روی سوکت LGA1150 نصب می کنید. دقت کنید که CPU های طراحی شده برای LGA1156 و LGA1155 را روی سوکت LGA1150 نصب نکنید.

۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

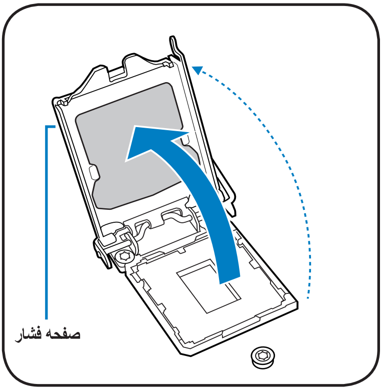


دقت کنید که درپوش PnP را از سوکت CPU جدا نکنید. انجام اینکار ممکن است باعث خمیدگی پین های سوکت شود.برای جایگذاری درپوش PnP به طریقه نصب زیر مراجعه کنید.

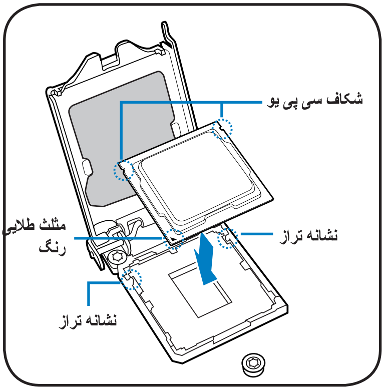
۲. اهرم فشار را با انگشت شست خود فشار دهید (A)، سپس آن را به سمت راست حرکت دهید (B) تا از زبانه نگهدارنده آزاد شود.



۲. اهرم فشار را در جهت پیکان بلند کنید تا صفحه فشار کاملاً بلند شود.

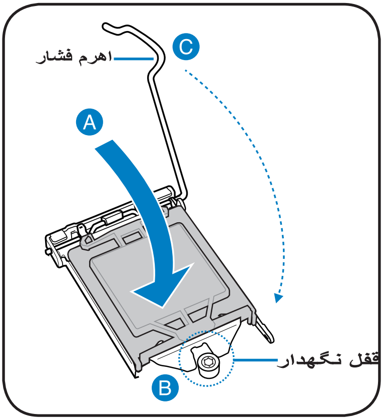


در حالیکه مطمئن می شوید که علامت مثلث طلایی به سمت گوشه چپ-پایین سوکت قرار گرفته است، CPU را بالای سوکت قراردهید، سپس شکافهای CPU را روی خارهای تراز شده سوکت محکم کنید.

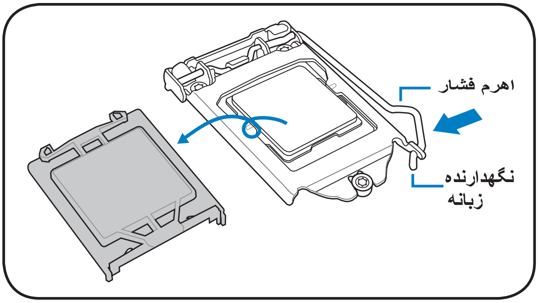

شکاف سی پی یو
مثلث طلایی رنگ
نشانه تراز
نشانه تراز

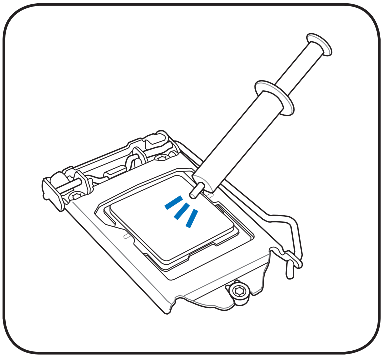
سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!

۵. صفحه بارگذاری (A) را ببندید و مطمئن شوید که لبه صفحه بارگذاری زیر قفل نگهدارنده (B) قرار می گیرد. سپس، اهرم بارگذاری (C) را به سمت پایین فشار دهید.


اهرم فشار
C
A
قفل نگهدارنده
B

۶. برای برداشتن درپوش PnP از روی سوکت CPU، اهرم بارگذاری را از زیر زبانه نگهدارنده جای دهید.


اهرم فشار
نگهدارنده
زبانه



۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.

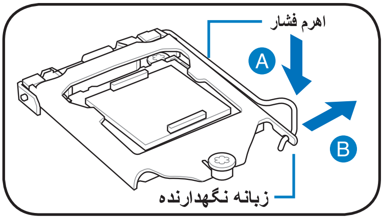
برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.

۸-۱-۱ سوکت LGA1150 اینتل (درپوش PnP زیر صفحه بارگذاری)

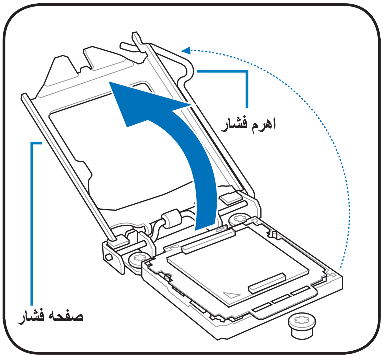
مطمئن شوید که فقط CPU طراحی شده درست را روی سوکت LGA1150 نصب می کنید. دقت کنید که CPU های طراحی شده برای LGA1155 و LGA1155 را روی سوکت LGA1150 نصب نکنید.

۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

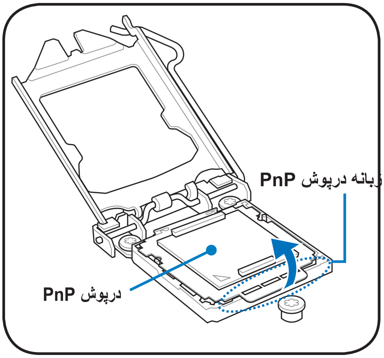

اهرم فشار
A
B
زبانه نگهدارنده

۲. اهرم فشار را با انگشت شست خود فشار دهید (A)، سپس آن را به سمت راست حرکت دهید تا از زبانه نگهدارنده آزاد شود. (B)

درپوش PnP را از روی پریز CPU برندارید. برداشتن درپوش ممکن است باعث خم شدن پین های درون پریز شود.


اهرم فشار
صفحه فشار

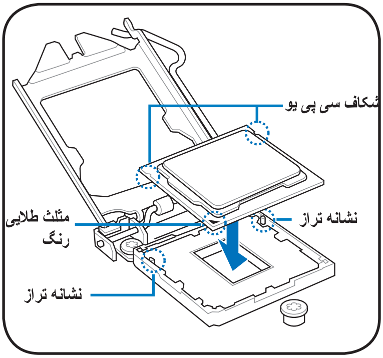
۳. اهرم فشار را در جهت پیکان بلند کنید تا صفحه فشار کاملاً بلند شود.


زبانه درپوش PnP
درپوش PnP

۴. درپوش PnP را فقط با بلندکردن زبانه از سوکت CPU خارج کنید.

۵. حالیکه مطمئن می شوید که علامت مثلث طلایی به سمت گوشه چپ-پایین سوکت قرار گرفته است، CPU را بالای سوکت قراردهید، سپس شکافهای CPU را روی خارهای تراز شده سوکت محکم کنید.

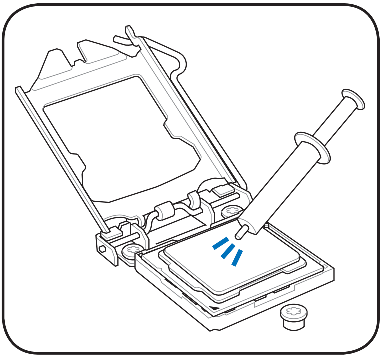
سی پی یو فقط در جهت صحیح در جای خود قرار می گیرد. سی پی یو را با زور داخل سوکت نکنید تا از خم شدن اتصال دهنده های روی سوکت و آسیب رسیدن به سی پی یو جلوگیری شود!



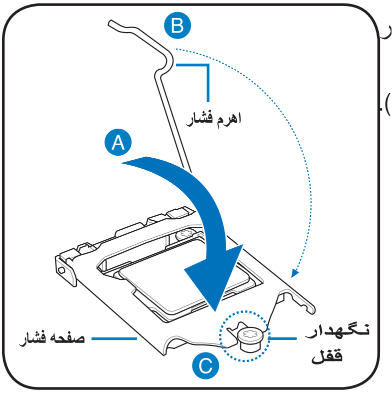
۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.

برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

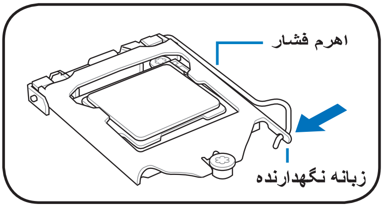
میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.



۷. صفحه فشار را ببندید (A)، و سپس اهرم فشار را به پایین فشار دهید (B)، دقت کنید که لبه جلویی صفحه فشار زیر قفل نگهدارنده بلغزد(C).



۸. اهرم فشار را زیر زبانه نگهدارنده قرار دهید.

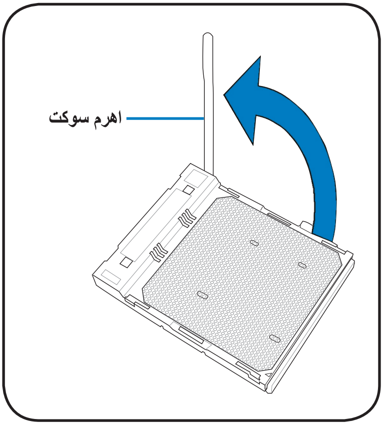

اهرم فشار
زبانه نگهدارنده

۱-۱-۹ سوکت AMD AM2/AM2+/AM3

- سوکت های AMD AM2 و +AM2 با پردازنده های +AMD AM2، AM2 و AM3 سازگار هستند.
- سوکت AMD AM3 با پردازنده های AMD AM3 سازگاری دارد. هرگز یک پردازنده AMD AM2+ / AM2 را روی سوکت AM3 نصب نکنید. تنها بعضی از مدلهای مادربرد AM3 با ارتقای BIOS از پردازنده های +AM3 پشتیبانی می کنند. برای اطلاعات بیشتر به سایت پشتیبانی ASUS مراجعه کنید.

۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

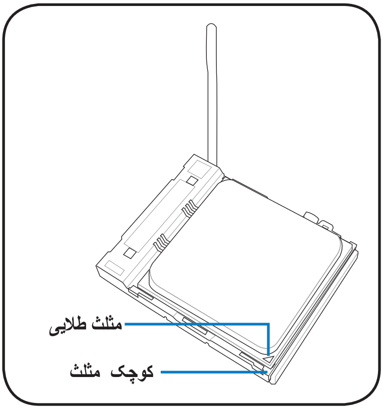
۲. اهرم را به طرفین فشار دهید تا قفل سوکت باز شود. سپس آن را تا زاویه ۹۰ درجه بلند کنید.

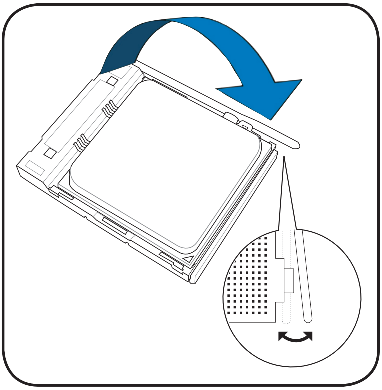


مطمئن شوید که اهرم سوکت با زاویه ۹۰ درجه بلند شده باشد، در غیر این صورت، CPU بطور کاملي درجاي خود قرار نخواهد گرفت.

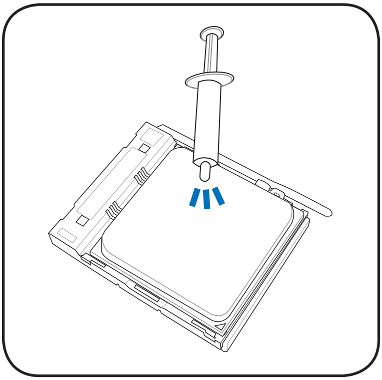
-۳ CPU را بالاي سوکت طوري قرار دهيد که گوشه CPU با مثلث طلايي با گوشه سوکت که آن هم مثلث طلايي رنگي دارد، تطبيق کند.

-۴ با دقت و احتياط CPU را به داخل سوکت داخل کنيد تا آن کاملا در جاي خود قرار بگيرد.





۵. هنگامي كه CPU در محل خود گرفته است، اهرم سوكت رابراي محكم كردن CPU به پايين فشار دهيد. اهرم موقعي كه در كنار آن قرار مي گيرد صداي كليك ايجاد مي كند كه نشان مي دهد قفل شده است.



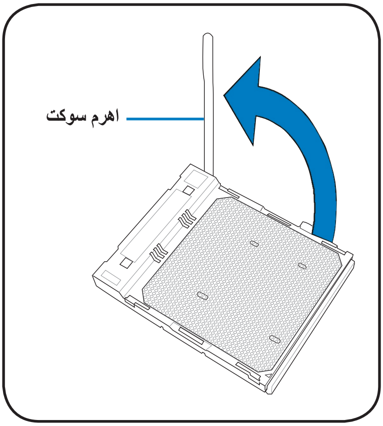
۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.

برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.

۱-۱-۱۰ سوکت AMD AM3

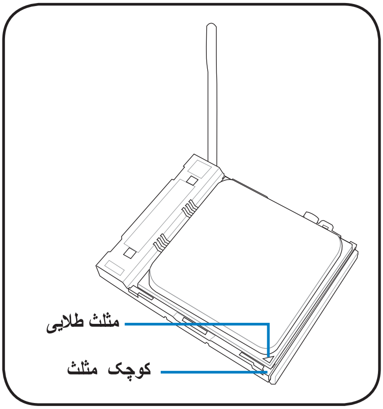
سوکت +AMD AM3 با پردازنده های +AMD AM3 و AM3 سازگاری دارد. تنها بعضی از مدلهای مادربرد AM3 با ارتقای BIOS از پردازنده های +AM3 پشتیبانی می کنند. برای اطلاعات بیشتر به سایت پشتیبانی ASUS مراجعه کنید.



۱. سوکت سی پی یو (CPU) را روی مادربرد پیدا کنید.

۲. اهرم را به طرفین فشار دهید تا قفل سوکت باز شود. سپس آن را تا زاویه ۹۰ درجه بلند کنید.

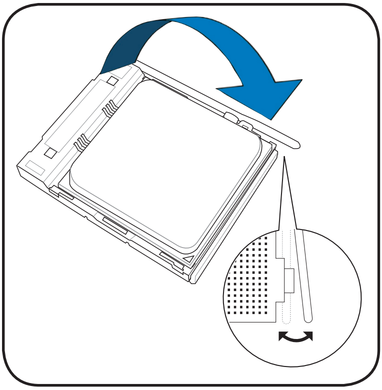
مطمئن شوید که اهرم سوکت با زاویه ۹۰ درجه بلند شده باشد، در غیر این صورت، CPU بطور كاملي درجاي خود قرار نخواهد گرفت.



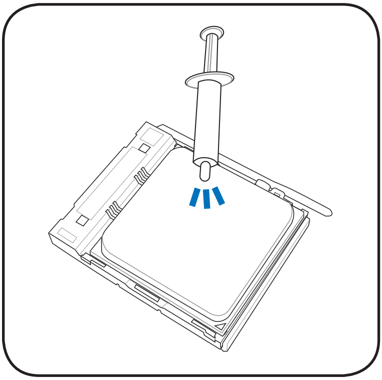
۳- CPU را بالاي سوكت طوري قرار دهيد كه گوشه CPU با مثلث طلايي با گوشه سوكت كه آن هم مثلث طلايي رنگي دارد، تطبيق كند.

۴- با دقت و احتياط CPU را به داخل سوكت داخل كنيد تا آن كاملا در جاي خود قرار بگيرد.

۵. هنگامي كه CPU در محل خود گرفته است، اهرم سوكت رابراي محكم كردن CPU به پايين فشار دهيد. اهرم موقعي كه در كنار آن قرار مي گيرد صداي كليك ايجاد مي كند كه نشان مي دهد قفل شده است.



۶. مقداری مواد میانجی حرارتی در قسمت روباز سی پی یو که با گرماگیر در تماس است قرار دهید، و دقت کنید در یک لایه نازک و یکدست پخش شود.



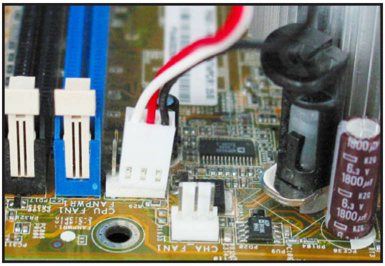
برخی از گرماگیرها خودشان دارای خمیر حرارتی هستند. در این صورت، از این مرحله صرف نظر کنید.

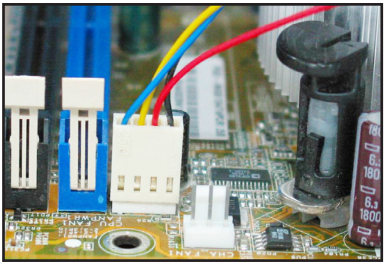
میانجی حرارتی سمی و غیرخوراکی است. آن را نخورید. اگر داخل چشم هایتان رفت یا با پوستتان تماس پیدا کرد، فوراً آن را بشویید، و به پزشک متخصص مراجعه کنید.

۲-۱ نصب هيت سينك وفن

براي نصب هيت سينك و فن CPU:

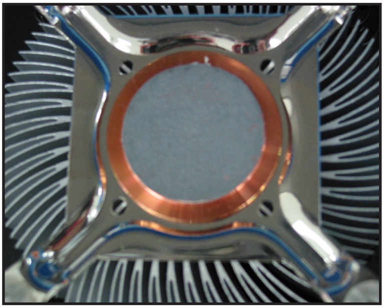
۱- يك مجموعه هيت سينك تاييد شده اينتل يا AMD و فن را براساس مادربرد خود انتخاب كنيد. ۳ پين (در سمت چپ) و ۴ پين (درسمت راست) كانكتورهاي فن وجود دارند.فقط فن هاي CPU با كانكتورهاي داراي ۴ پين تكنولوژي Q-Fan ASUS را پشتيباني مي كنند.





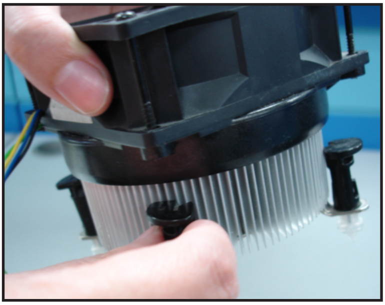
براي هيت سينك تاييد شده اينتل:

۲- بعضي هيت سينك ها با خمير گرمايي كه قبلا به روي آن ماليده شده است عرضه مي شوند. اگر چنين باشد آن را جدا نكنيد و فقط قبل از نصب فيلم محافظ روي آن را جدا كنيد. اگر چنين نباشد، قبل از نصب هيت سينك چندين قطره از خمير گرمايي را برروي محل تماس CPU با هيت سينك بماليد. مطمئن شويد كه آن در لايه يكنواخت برروي هيت سينك پخش شود.



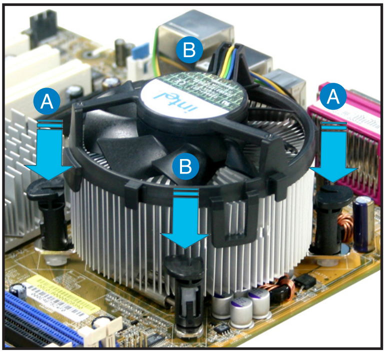
براي جلوگيري از آلودگي خمير، آن را مستقيما توسط انگشت خود پهن نكنيد.

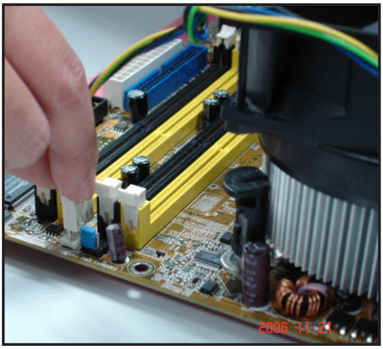
۳- هرشكاف سفت كننده را با انتهاي باريك شياريك اسباب كوچك در جهت مناسب قرار دهيد



۴- دو شكاف سفت كننده را دريك زمان با توالي قابل مشاهده به پايين فشار دهيد تا مطمئن شويد كه مجموعه هيت سينك و فن بطور محكمي در جاي خود قرار گرفته است.

۵- كابل فن CPU را به كانكتور مطابق آن در روي مادربرد وصل كنيد.

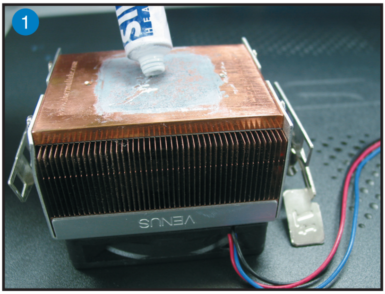


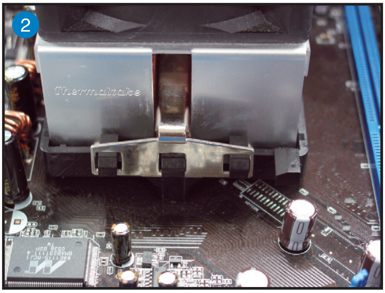


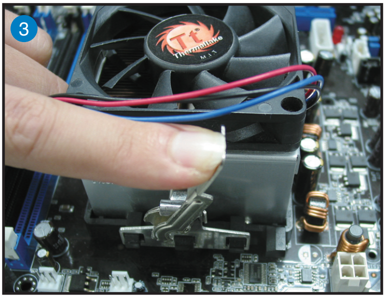
فراموش نكنيد كه كانكتور فن CPU را متصل كنيد! اگر شما اين كانكتور را متصل نكنيد خطاي نمايش و كشف سخت افزار اتفاق مي افتد و ما پيشنهاد مي كنيم كه شما از يك هيت سينك كامل استفاده كنيد كه حداكثر تهويه گرماي محل را بدست آوريد.

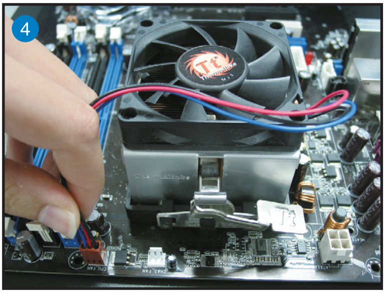
براي هيت سينك با تاييدAMD:

دستورالعملهاي زير را براي نصب هيت سينك با تاييد AMD رعايت كنيد.




2
Thermaltake


3
Thermaltake


4
Thermaltake

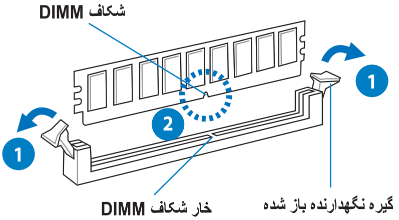
۱-۳ نصب DIMM

حتماً قبل از افزودن یا جدا کردن DIMMها یا دیگر اجزای سیستم پریز برق را بکشید. عدم انجام این کار ممکن است باعث ایجاد آسیب جدی به مادربرد و آن اجزا شود.

نصب DIMM روی سوکت دوگیره ای DIMM

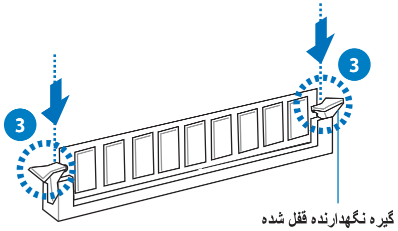
۱. قفل سوکت DIMM را با فشار دادن گیره های نگهدارنده به بیرون باز کنید.

۲. DIMM را به گونه ای روی سوکت میزان کنید که بریدگی روی DIMM با خار شکاف DIMM هماهنگ شود.



یک DIMM دارای یک برش است تا فقط در یک جهت بتوان آن را در جای خود قرار داد. از واردآوردن فشار به DIMM به داخل سوکت در جهت نادرست خودداری کنید تا از وارد آمدن آسیب به DIMM جلوگیری شود.

۳. DIMM را از هردو انتهای آن بگیرید، سپس DIMM را بصورت عمودی داخل سوکت نمایید. بطور همزمان به هردو انتهای DIMM فشار وارد کنید تا گیره های نگهدارنده در جای خود قفل شده و DIMM دیگر نتواند بیشتر به سمت داخل فشار داده شود، تا از قرارگیری مناسب DIMM اطمینان حاصل گردد.



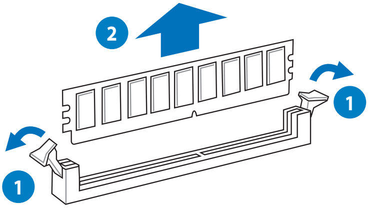
همیشه DIMM را بصورت عمودی داخل سوکت نمایید تا از آسیب دیدن شکاف DIMM جلوگیری شود.

- برای نصب دو یا چند DIMM، به راهنمای کاربر که در جعبه مادربرد قرار دارد مراجعه کنید.
- برای مشاهده فهرست فروشنده های معتبر ماژول های حافظه به راهنمای کاربر مراجعه کنید.

خارج کردن DIMM از یک سوکت دو گیره ای DIMM

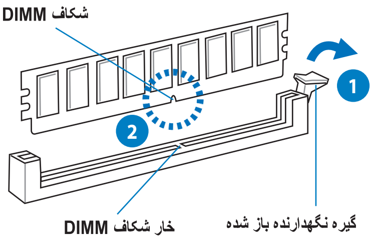
۱. گیره های نگهدارنده را بطور همزمان به سمت بیرون فشار دهید تا DIMM آزاد شود.

۲. DIMM را از سوکت خارج کنید.



هنگام فشاردادن گیره های نگهدارنده، DIMM را به ملایمت با انگشتان خود نگه دارید. اگر DIMM با نیروی بیش از حد بیرون بپرد، ممکن است آسیب ببیند.

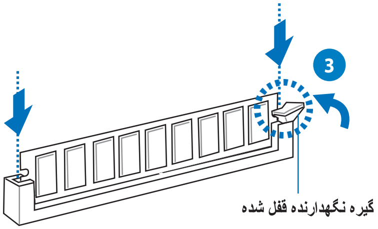
نصب DIMM روی سوکت تک گیره ای DIMM



۱. قفل سوکت DIMM را با فشار دادن گیره های نگهدارنده به بیرون باز کنید.

۲. DIMM را به گونه ای روی سوکت میزان کنید که بریدگی روی DIMM با خار شکاف DIMM هماهنگ شود.

یک DIMM دارای یک برش است تا فقط در یک جهت بتوان آن را در جای خود قرار داد. از واردآوردن فشار به DIMM به داخل سوکت در جهت نادرست خودداری کنید تا از وارد آمدن آسیب به DIMM جلوگیری شود.

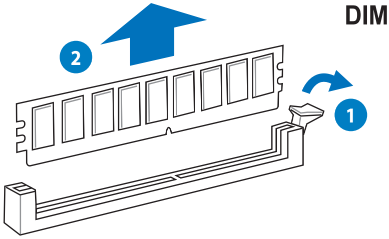


۳. DIMM را از هردو انتهای آن بگیرید، سپس DIMM را بصورت عمودی داخل سوکت نمایید. بطور همزمان به هردو انتهای DIMM فشار وارد کنید تا گیره های نگهدارنده در جای خود قفل شده و DIMM دیگر نتواند بیشتر به سمت داخل فشار داده شود، تا از قرارگیری مناسب DIMM اطمینان حاصل گردد.

همیشه DIMM را بصورت عمودی داخل سوکت نمایید تا از آسیب دیدن شکاف DIMM جلوگیری شود.

- برای نصب دو یا چند DIMM، به راهنمای کاربر که در جعبه مادربرد قرار دارد مراجعه کنید.
- برای مشاهده فهرست فروشنده های معتبر ماژول های حافظه به راهنمای کاربر مراجعه کنید.

خارج کردن DIMM از یک سوکت تک گیره ای DIMM

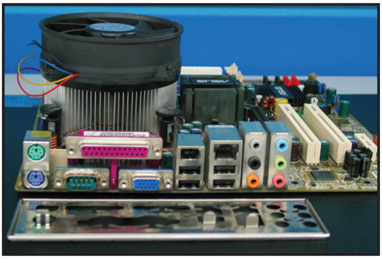


۱. گیره نگهدارنده را به سمت بیرون فشار دهید تا DIMM آزاد شود.

۲. DIMM را از سوکت خارج کنید.

هنگام فشاردادن گیره های نگهدارنده، DIMM را به ملایمت با انگشتان خود نگه دارید. اگر DIMM با نیروی بیش از حد بیرون بپرد، ممکن است آسیب ببیند.

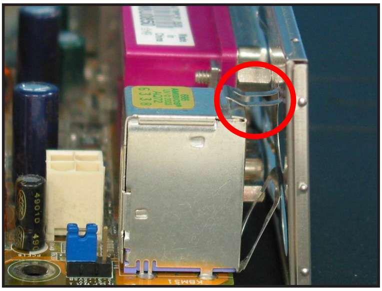
۴-۱ نصب مادربرد



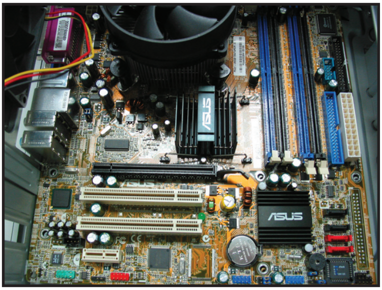
۱- پورت هاي I/O در مادربرد هاي مختلف فرق مي كنند. از شيلد I/O عقبي كه همراه بسته مادربرد عرضه شده است استفاده و نصب كنيد.

بعضي لبه هاي و نقطه هاي تيز مي توانند باعث زخمي شدن و جراحت بدني شوند. ما توصيه مي كنيم كه از دستكش هاي مقاوم دربرابر اشياي تيز و برنده قبل از نصب شيلد I/O و مادربرد استفاده كنيد.

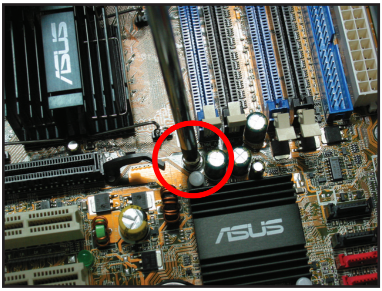
۲- پايه هاي نگهدارنده را به سوراخهاي پيچهاي منطبق درروي بشقابك فلزي نصب كنيد.



۳- فنرهاي لبه هاي شيلد I/O ممكن است به پورت هاي I/O صدمه بزنند. هنگام نصب شيلد I/O احتياط كنيد.



۴- I/O را در كناره مادربرد در جهت عقب شاسي قرار دهيد و مادربرد را به داخل شاسي داخل كنيد.



۵- هر پيچ را با اولين توالي قابل مشاهده داخل و كمي سفت كنيد. بعد از داخل كردن همه پيچ ها، پيچها را بپيچانيد تا در حد انگشت سفت شوند.

- شما مي توانيدقبل از نصب مادربرد پوشش هاي سلات فلزي را براي كارت هاي حايل در عقب شاسي جدا كنيد در بعضي از مدلهاي شاسي، ممكن است جدا كردن پوشش سلات حايل بعد از نصب دشوار باشد.
- پيچ ها را بيش از حد سفت نكنيد. انجام اين كار به مادربرد صدمه مي زند.

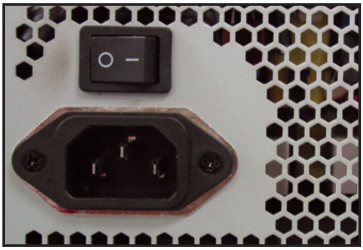
۵-۱ نصب واحد منبع تغذيه

دو نوع از واحدهاي منبع تغذيه وجود دارد كه معمولا استفاده مي شوند. يكي با عامل اتصال فعال برق (PFC) و ديگري با PFC غير فعال است.

۱- واحد منبع تغذيه را انتخاب كنيد.

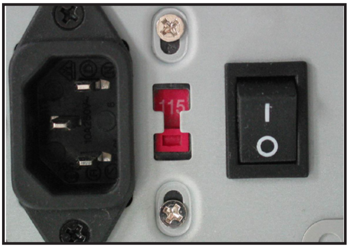
منبع تغذيه با PFC فعال:

PFC فعال بطور اتوماتيكي ولتاژ ورودي را تنظيم مي كند.

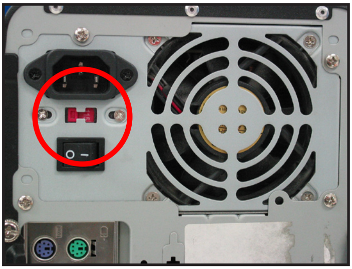


منبع تغذيه با PFC غير فعال:

در.PFC غير فعال لازم است كه كاربر بطور دستي ولتاژ ورودي متناوب را تنظيم كند.



۲- اگر شما از منبع تغذيه با PFC غير فعال استفاده مي كنيد، آن را با ولتاژ ورودي را با ولتاژ متناوب درست منطقه خود تنظيم كنيد.



كوتاهي در تنظيم منبع تغذيه با ولتاژ متناوب درست باعث صدمه شديد به سيستم مي شود.

از واحد هاي منبع تغذيه فقط با تاييد ايمني استفاده كنيد. استفاده از منبع تغذيه غير ثابت مي تواند باعث صدمه به مادربرد و قطعات ديگر شود. به راهنماي كاربر براي واحدهاي منبع تغذيه مراجعه كنيد تا كاملا با احتياجات مادربرد شما مطابقت كنند.

۶-۱ نصب کارت حایل

براي نصب کارت حایل:

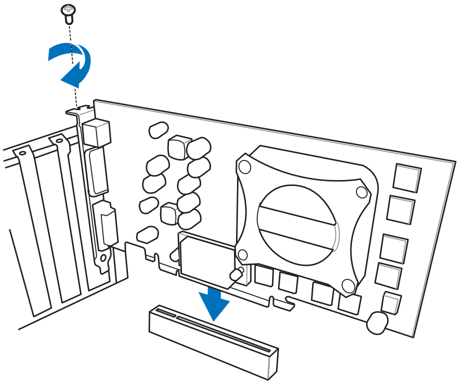
۱- پوشش سلات فلزي را در سمت مقابل سلات کارت حایل که مي خواهید کارت حایل را نصب کنید جدا کنید.

۲- کارت حایل را نصب کنید و مطمئن شوید که آن بطور درستي در سلا قرار گرفته است.

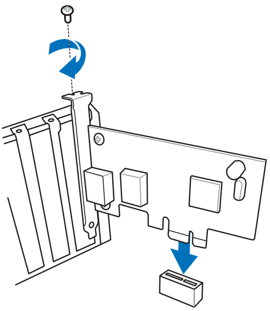
۳- پیچها را ببندید تا کارت حایل در سلات محکم شود.

۴- مراحل قبلي را براي نصب کارت حایل دیگر تکرار کنید.

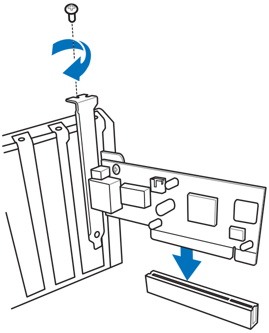
کارت PCIE x16



کارت PCIE x1



PCIکارت

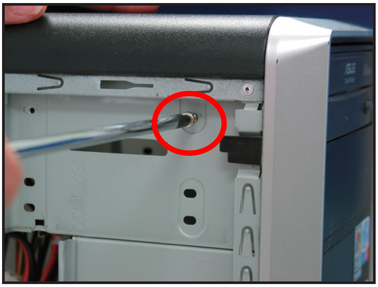


- به مدارك کارت براي مشخص سازي جزئیات آن، و به راهنماي کاربر مادربرد در کیسي که شما مي خواهید همه جامپرها را بعد از نصب کارت حایل مشخص کنید، مراجعه کنید.
- به راهنماي کاربر مادربرد براي دستورالعملهاي اتصال کابل سیگنال کارت حایل مراجعه کنید.

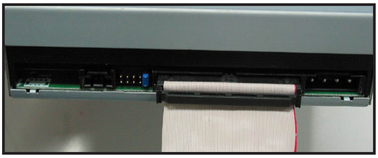
۷-۱ نصب درايو ديسك ها

۱-۷-۱ نصب درايو ديسك نوري PATA

۱- پوشش ساختگي را درببياوريد و درايو ديسك نوري را به كشويي محل آن بلغزانيد و داخل كنيد.



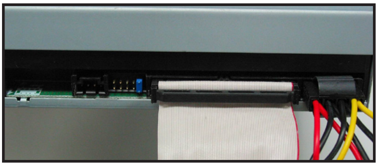
۲- سوراخ هاي پيچ ها را تراز كنيد و درايو ديسك را با پيچ ها محكم كنيد.



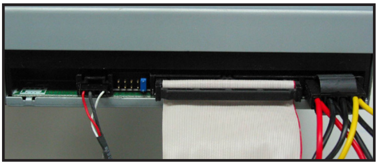
۳- كابل IDE را در جهت درست قرار دهيد و به درايو نوري را وصل كنيد. نوار قرمز كابل IDE انتهاي پين ۱ است و بايستي با علامت فرورفتگي پين ۱ در روي درايو نوري مطابقت كند.

كابل هاي IDE بدون فرورفتگي هستند. هرگز كابل هاي IDE را با فشار به كانكتور داخل نكنيد.

۴- کابل برق ۴ پین را به درایو نوري وصل کنید.

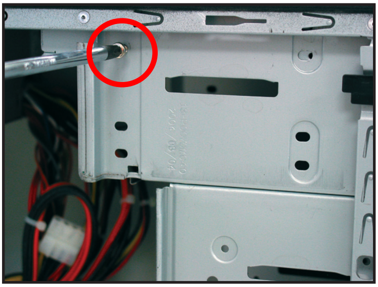


۵- کابل صدا را به کانکتور روي درایو نوري وصل کنید.

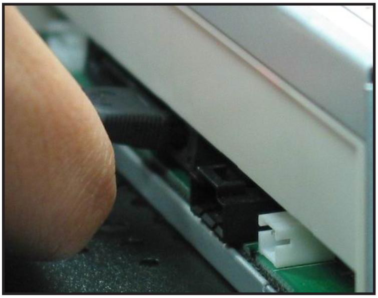


۱-۷-۲ درايو ديسك نوري SATA

۱- پوشش فرورفتگي را جدا كنيد و درايو ديسك نوري را به كشويي محل آن بلغزانيد و داخل كنيد.

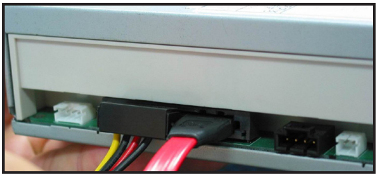


۲- سوراخهاي پيچ ها را تراز كنيد و ديسك درايو را با پيچ ها محكم كنيد.

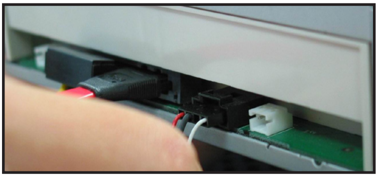


۳- كابل SATA در جهت مناسب قرار داده و به درايو نوري وصل كنيد. كابل هاي SATA بدون فرو رفتگي مي باشند. هرگز كابل SATA را با فشار به داخل كانكتور وصل نكنيد.

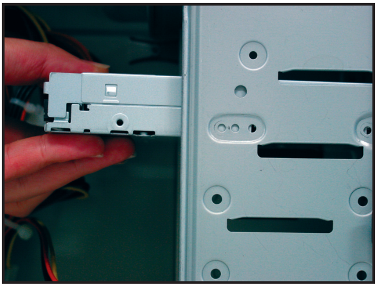
۴- کابل برق SATA را به درایو نوري وصل کنید.



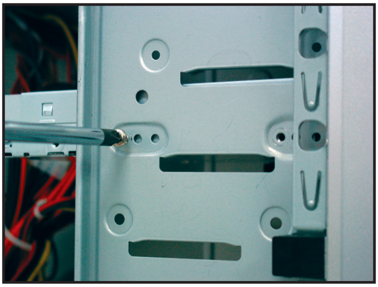
۵- کابل صدا را به کانکتور درایو نوري وصل کنید.



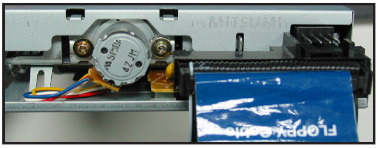
۱-۷-۳ درايو فلاپي ديسك



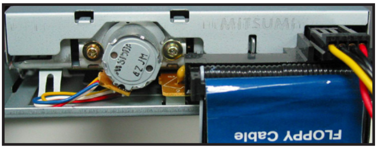
۱- پوشش فرورفتگي را جدا كنيد و درايو فلاپي ديسك را به كشويي محل آن داخل كنيد.



۲- سوراخ هاي پيچ ها را تراز كنيد و درايو ديسك را با پيچ ها محكم كنيد.



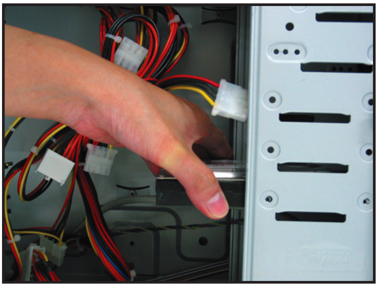
۳- كابل رابط فلاپي ديسك را در جهت مناسب قرار داده و به درايو فلاپي ديسك وصل كنيد. نوار قرمز روي كابل پين ۱ انتهايي مي باشد و بايستي با پين ۱ درايو فلاپي ديسك مطابقت كند.



۴- كابل برق فلاپي ديسك را به كانكتور آن در عقب درايو فلاپي ديسك وصل كنيد.

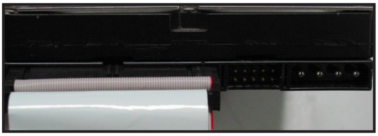
۴-۷-۱ درایو هارد دیسك PATA

۱- درایو هارد دیسك PATA را به کشويي محل آن داخل کنيد.

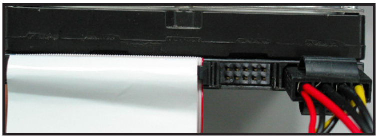


۲- سوراخهاي پيچ ها را ترازكنيد و درايو ديسك را توسط پيچها محكم كنيد.

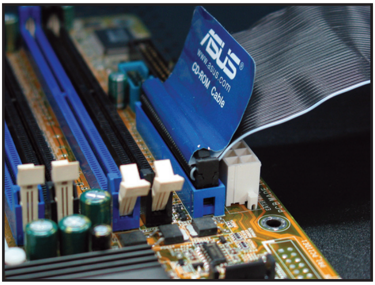
۳- کابل سيگنال را در جهت مناسب به درايو هارد ديسك وصل كنيد. نوار قرمز روي كابل انتهاي پين ۱ را نشان مي دهد. شكاف بدون فرو رفتگي را تطبيق دهيد و كابل را با فشار به كانكتور داخل نكنيد.



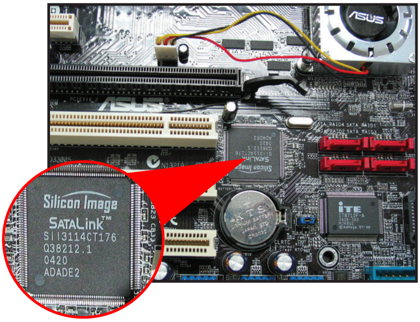
۴- کابل برق ۴ پين را به كانكتور عقب درايو هارد ديسك وصل كنيد.



۵- انتهاي ديگر كابل سيگنال را به سلات منطبق درروي مادربرد وصل كنيد.



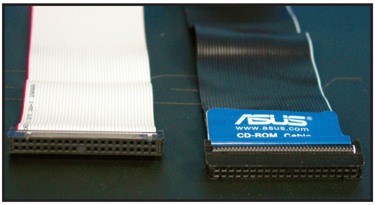
نكته هايي براي نصب درايو هارد ديسك PATA


Silicon Image
SATALink™
SiI3114CT176
Q38212.1
0420
ADADE2

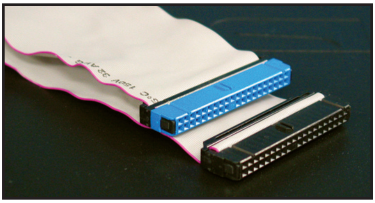
- اگر سيستم عامل شما بر هارد ديسك كه توسط RAID يا كنترل كننده هاي ديگر كنترل مي شود، نصب شده است، شما بايد اول درايور كنترل كننده را بر هارد ديسك خود نصب كنيد.

ASUS
www.asus.com
FLOPPY Cable
ASUS
www.asus.com
CD-ROM Cable

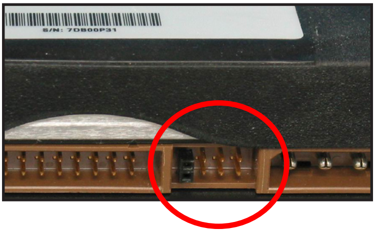
- كابل هاي با دگمه هاي كشيدني طراحي شده اند. لذا مي توانيد درايو هاي هارد ديسك را براساس برچسب هاي كابل ها نصب كنيد. براي جلوگيري از صدمه ديدن پين ها، كابل را با كشيدن دگمه هاي كابل قطع كنيد.


ASUS
www.asus.com
CD-ROM Cable

- دو كابل براي درايو هارد ديسك ATA IDE يكي واير- ۸۰ جديدتر (سمت راست) و ديگري واير-۴۰ (سمت چپ) قديمي تروجود دارد. براي درايو هاي هارد ديسك ATA66/100/133، فقط كابل واير-۸۰ مي تواند كارآيي بهتري داشته باشد. كابلهاي واير-۴۰ معمولا براي درايوهاي نوري هستند.



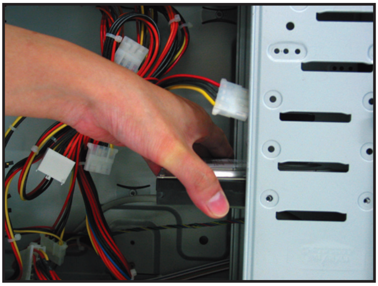
- كانكتور كابل داراي كد رنگي است. رنگ آبي براي كانكتور ميزبان، رنگ سياه/ خاكستري براي درايو هارد ديسك اولي/ دومي است.


S/N: 7DB00P31

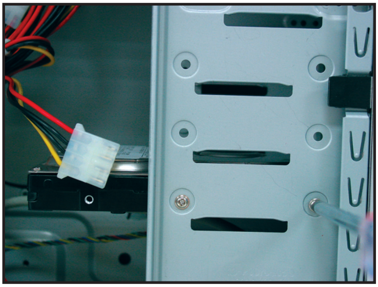
- هنگام وصل دو وسيله IDE، شما بايد جامپرها را در موقعيت هاي مختلفي، يكي به عنوان اصلي و ديگري به عنوان فرعي تنظيم كنيد. اگر شما از كابل واير-۸۰ استفاده مي كنيد، شما مي توانيد از كابل با انتخاب سبك ونوع استفاده كنيد.

۵-۷-۱ درايو هارد ديسك SATA

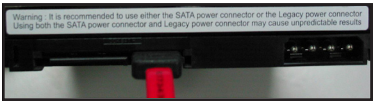
۱- درايو هارد ديسك SATA را به كشويي محل آن داخل كنيد.



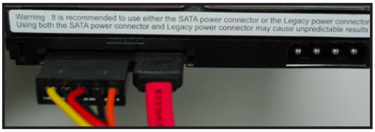
۲- سوراخهاي پيچهارا تراز كرده و درايو هارد ديسك را با پيچ ها محكم كنيد.



۳- كابل SATA را در جهت مناسب به هارد ديسك وصل كنيد. كابل فقط مي تواند در يك جهت قرار گيرد.

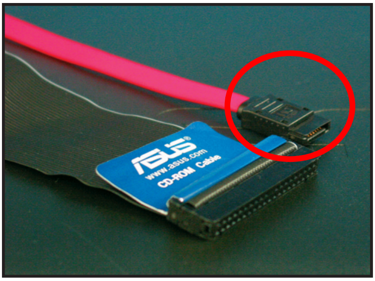

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

۴- كابل برق SATA را به كانكتور عقب هارد ديسك وصل كنيد.

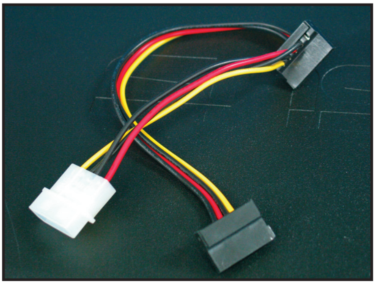

Warning : It is recommended to use either the SATA power connector or the Legacy power connector
Using both the SATA power connector and Legacy power connector may cause unpredictable results

نكته هايي براي نصب درايو هارد ديسك SATA

- حايل سريال ATA (SATA) سرعت ارسال بالاتر ديتا، و تلرانس بهتر ولتاژ را فراهم مي كند. طرح ظريف جديد كابل هاي SATA مسائل كابل بندي را برطرف كرده و امكان جريان بهتر هوا در شاسي را ايجاد مي كند.

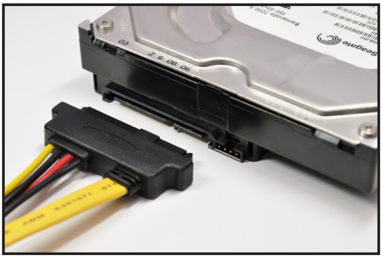

ASUS
www.asus.com
CD-ROM Cable

- كانكتور كابل برق SATA از كانكتور برق سنتي ۴-پين متفاوت است. مادربرد ASUS كابل هاي آداپتور هاي برق را در شاسي جمع وجور كرده بطوريكه واحد منبع تغذيه شامل اين كانكتور جديد نمي باشد.

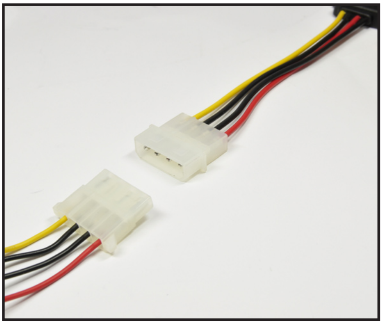


۱-۷-۵. درایو هارد دیسك SAS

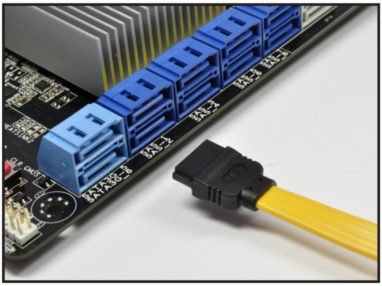
۱- کابل سیگنال SAS / کمبوی برق را با جهت مناسب به درایو دیسک سخت متصل کنید. عقب هارد دیسك وصل کنید.



۲- کابل برق SAS را به رابط برق روی واحد تامین برق متصل کنید.



٦- کابل سیگنال SAS را به رابط SAS روی مادربورد متصل کنید.

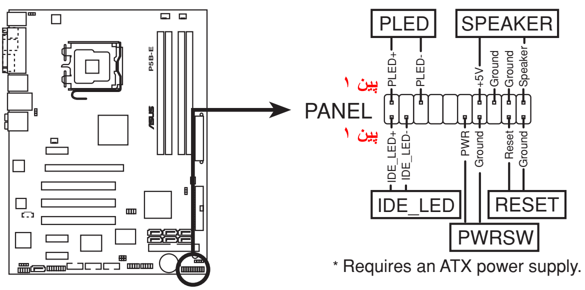


۸-۱ کابل هاي پانل جلوي

براي اتصال کابل هاي پانل جلوي:

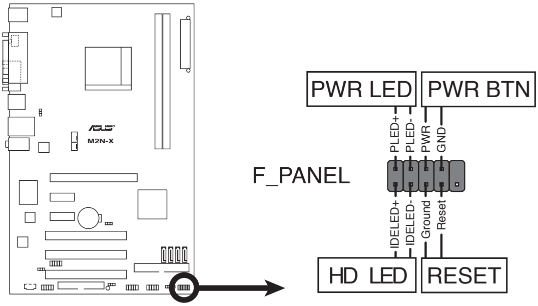
- رست (سويچ رست)
- PLED (LED برق)
- PWRSW (سويچ برق)
- IDE_LED (LED فعال بودن هارد ديسك IDE)
- بلندگو (كانكتور بلندگو)

کانکتور ۸-۲۰ پین پانل جلوي


P5B-E
PLED
SPEAKER
PLED+
PLED-
+5V
Ground
Ground
Speaker
پین ۱
PANEL
پین ۱
IDE_LED+
IDE_LED-
PWR
Ground
Reset
Ground
IDE_LED
RESET
PWRSW

* Requires an ATX power supply.

پین ۱-۱۰ کانکتور پانل جلوي

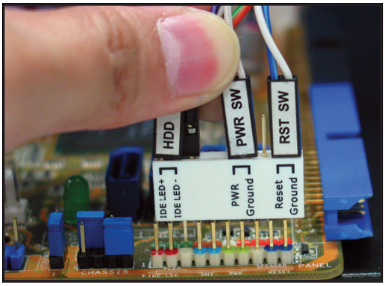

M2N-X
PWR LED
PWR BTN
PLED+
PLED-
PWR
GND
F_PANEL
IDELED+
IDELED-
Ground
Reset
HD LED
RESET

- کابل هاي پانل جلوي شاسي شما ممکن است با مدل يا طرحهاي مختلف فرق کنند. اين کانکتورها را برطبق برچسب آنها به مادربرد وصل کنيد.
- اگر LED ها روشن نشوند محل پين آنها درست نمي باشد، شما ممکن است که پين هاي اتصال زمين را با پين هاي سيگنال اشتباهي وصل کرده ايد. معمولا وايرهاي سفيد براي پين هاي اتصال زمين ووايرهاي با کد رنگي براي پين هاي سيگنال مي باشند.
- کابلهاي پانل جلوي مانند بلندگو، رست و PWRSW جهت مشخصي ندارند، ولي کابلهاي IDE_LED و PLEAD بايد در جهت مناسب وصل شوند. پين ۱کابل را به پين ۱ کانکتور درروي مادربرد وصل کنيد.
- کانکتورهاي پانل جلوي با توجه به مدل مادربرد شما متفاوت مي باشند، به راهنماي کاربر براي اطلاعات بيشتر مراجعه کنيد.

كانكتور-Q ASUS

نصب يك مرحله اي كانكتور-Q ASUS زمان لازم را براي مرتب كردن كابل هاي درهم و زياد پانل جلوي كاهش مي دهد. به راهنماي كاربر براي جزئيات بيشتر مراجعه كنيد.

Q-Connector

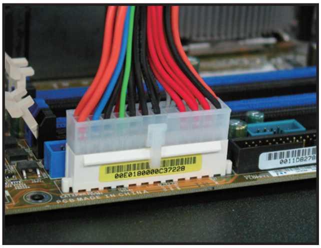


كانكتور- Q در مدلهاي انتخاب شده موجود است. به راهنماي كاربر براي جزئيات بيشتر مراجعه كنيد.

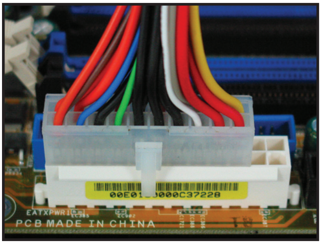
۱-۹ اتصال به منبع برق ATX

كانكتورهاي منبع برق ATX مي توانند در هر جهتي قرار گيرند. از كليپ كناري براي وصل كردن كانكتورها به مادربرد استفاده كنيد. كانكتورهاي برق نر را با فشار به روي بخش هاي ماده آنها در روي مادربرد داخل نكنيد. معمولا دو كانكتوربرق ۲۴- پين و ۴- پين درروي مادربرد وجود دارند. بعضي از منبع هاي تغذيه قديمي فقط يك كانكتور برق ۲۰- پين دارند كه مي تواند برروي كانكتور ۲۴- پين درروي مادربرد قرار بگيرد.

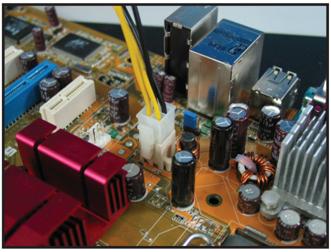
كانكتور برق ۲۴- پين



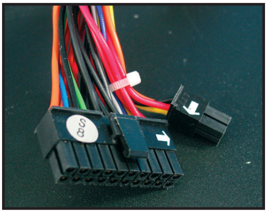
كانكتور برق ۲۰- پين
(روي بخش ماده ۲۴- پين)

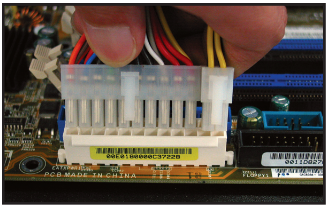


كانكتور برق ۴- پين



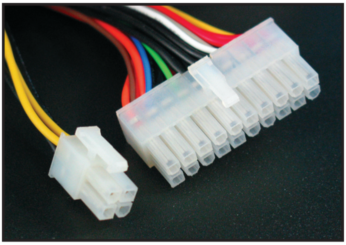
- هنگام وصل کردن کانکتورهاي برق به مادربرد منبع برق خارجي را وصل نکنيد.
- مطمئن شويد که کانکتورهاي برق کاملا به مادربرد محکم شده باشند.
- اگر منبع تغذيه ٢٠- پين+۴- پين را پشتيباني بکند، شما مي توانيد اين دو کانکتوررا با هم ترکيب کنيد و برروي کانکتورهاي ٢۴- پين روي مادربرد نصب کنيد.



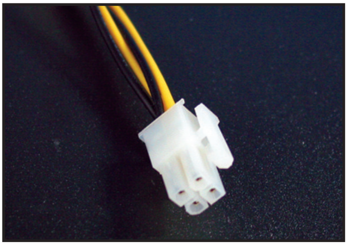


کانکتورهاي برق

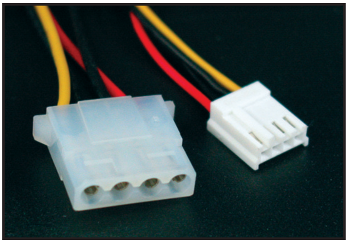
ATX پين 20+(24) كانكتور



کانکتور ۴- پين ATX

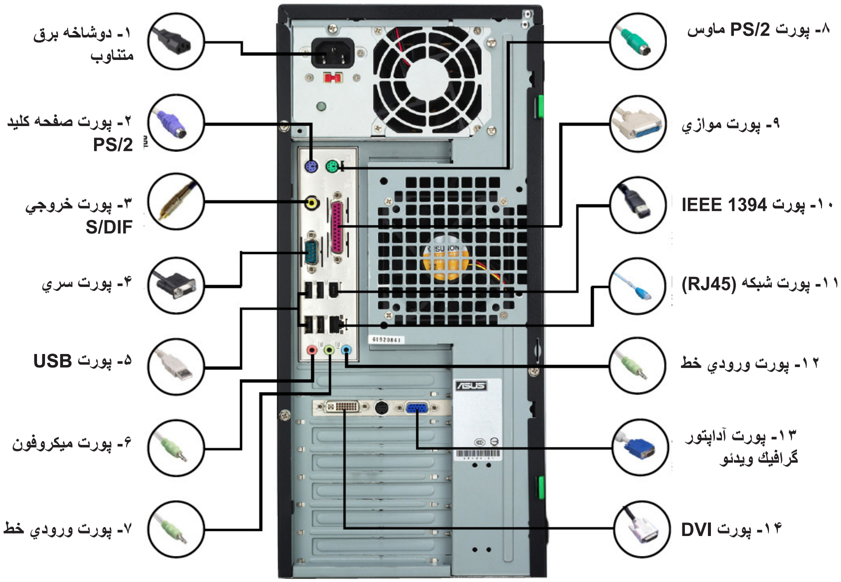


کانکتور برق جانبي (سمت چپ)
کانکتور برق فلاپي ديسک (سمت راست)



۱-۱۰ وسایل و قطعات جانبي

به شكل زير براي اتصال وسايل و قطعات جانبي مراجعه كنيد.


۱- دوشاخه برق متناوب
۲- پورت صفحه كليد PS/2
۳- پورت خروجي S/DIF
۴- پورت سري
۵- پورت USB
۶- پورت ميكروفون
۷- پورت ورودي خط
۸- پورت PS/2 ماوس
۹- پورت موازي
۱۰- پورت IEEE 1394
۱۱- پورت شبكه (RJ45)
۱۲- پورت ورودي خط
۱۳- پورت آداپتور گرافيك ويدئو
۱۴- پورت DVI

۱- دوشاخه برق متناوب + كابل ادامه دار برق

۲- پورت صفحه كليد PS/2 + صفحه كليد

۳- پورت خروجي S/PDIF + سيستم بلندگوي ديجيتال ۵,۱

۴- پورت سري + محفظه PDA

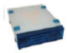
۵- پورت USB + وسايل USB

۶- پورت ميكروفون + ميكروفون

۷- پورت خط خروجي + بلندگو

۸- پورت ماوس PS/2 + ماوس

۹- پورت موازي + چاپگر

۱۰- پورت IEEE 1394 + درايو هارد ديسك خارجي


۱۱- پورت شبكه (RJ45) + مودوم

۱۲- پورت خط ورودي + ضبط كننده

۱۳- پورت VGA + مانيتور CRT

۱۴- پورت DVI + مانيتور LCD

كانكتورهاي پانل عقبي با توجه به مدل فرق مي كنند. براي اطلاعات بيشتر به راهنماي كاربر مراجعه كنيد.

١١-١ شروع براي اولين دفعه

سپس سيستم به حالت تست برق خود يا POST مي رود. هنگامي كه تست انجام مي شود، DIOS صداي بيپ مي دهد (جدول كدهاي بيپ BIOS را در زير ببينيد)

صداي بيپ BIOS	توصيف
يك صداي ادامه دار بيپ با سه صداي بيپ كوتاه به دنبال آن	VGA كشف نشده است
يك صداي بيپ ادامه دار با سه صداي بيپ كوتاه و يك مكث به دنبال آن (تكراري)	حافظه كشف نشده است
يك صداي بيپ ادامه دار با چهار صداي بيپ كوتاه به دنبال آن	افت قطعات سخت افزار (AMI BIOS)
چهار صداي بيپ كوتاه	افت قطعات سخت افزار (AWARD BIOS)

عيب يابي

عيب	عمل
• نمي توانم كامپيوتر را روشن كنم • LED برق روشن نمي شود • فن منبع تغذيه كار نمي كند.	مطمئن شويد كه كابل برق به طور درستي وصل شده است.
كامپيوتر روشن است ولي مانيتور سياه مي باشد.	• مطمئن شويد كه برق مانيتور روشن است و كابل VGA به طور درستي وصل شده است. • روشنايي و كنتراست مانيتور را تنظيم كنيد. • كامپيوتر را خاموش كنيد و كابل برق را دربياوريد. بررسي كنيد كه كارت VGA بطور محكمي وصل شده باشد.
حافظه كشف نشده است	• مطمئن شويد كه مدول حافظه درست نصب شده باشد. • مطمئن شويد كه DIMM ها بطور محكمي در سوكت DIMM نشسته اند. • مطمئن شويد كه مدول حافظه از فروشنده معتبري تهيه شده است. به راهنماي كاربر براي QVL مراجعه كنيد.
خطاي فلاپي ديسك (نشانگر هميشه روشن است يا پيغام هشدار برروي صفحه نشان داده مي شود)	• مشخص سازي BIOS را درباره درايو فلاپي ديسك بررسي كنيد. • مطمئن شويد كه كابل هاي درايو فلاپي ديسك بطور درستي وصل شده اند.
خطاي درايو ديسك سخت/ نوري (كشف يا شناخته نشده است)	• مطمئن شويد كه تنظيمات جامپرها درست باشد (اصلي/ فرعي) • مشخص سازي BIOS را درباره درايو ديسك سخت/ نوري بررسي كنيد. • مطمئن شويد كه كابل هاي وسيله بطور محكمي وصل شده باشند. • مطمئن شويد كه درايورهاي وسيله نصب شده باشند.

بخش ۲: مديريت/ ارتقا BIOS

۲-۱ استفاده از برنامه AFUDOS

استفاده ازبرنامه AFUDOS به شما امكان مي دهد كه BIOS را در محيط DOS با استفاده از فلاپي ديسك قابل بوت كردن با فايلهاي بهنگام شده BIOS ارتقا دهيد. اين استفاده همچنين به شما امكان مي دهد كه فايل BIOS فعلي را كپي كنيد و از آن به عنوان پشتيبان موقع افت BIOS يا اختلال در طي عملكرد ارتقا استفاده كنيد.

كپي كردن BIOS فعلي

براي كپي كردن فايل BIOS فعلي با استفاده از برنامه AFUDOS:

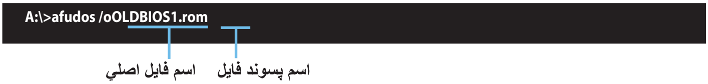
- مطمئن شويد كه فلاپي ديسك در برابر كپي محافظت نشده باشد و حداقل ۱۰۲۴ كيلوبايت فضاي خالي براي ذخيره فايل داشته باشد.
- صفحه نمايش BIOS فقط براي اشاره است. صفحه BIOS اصلي ممكن است مانند مورد فوق نباشد.

۱- برنامه AFUDOS (afudos.exe) از مادربرد با پشتيباني DVD از فلاپي ديسك قابل بوت كردن كه شما قبلا آن را تهيه كرده ايد كپي كنيد.

۲- سيستم را در مد DOS بوت كنيد، سپس به مد Prompt برويد:

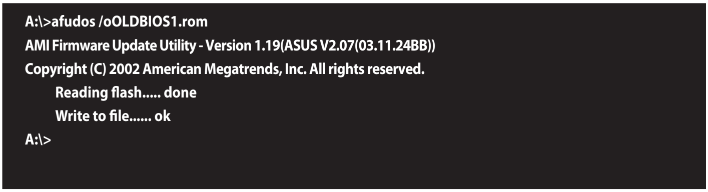
afudos /o [اسم فايل]

اينجا بايد [اسم فايل] فايل انتخابي كاربر بيشتر از هشت كاراكتر الفبايي و حرفي براي اسم فايل اصلي و سه كاراكتر الفبايي و حرفي براي پسوند فايل نداشته باشد.



```
A:\>afudos /oOLDBIOS1.rom
```

۳- دگمه <Enter> را فشار دهيد. برنامه فايل bios فعلي را به فلاپي ديسك كپي خواهد كرد.



```
A:\>afudos /oOLDBIOS1.rom
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.
     Reading flash..... done
     Write to file...... ok
A:\>
```

برنامه بعد از كپي كردن فايل BIOS فعلي به محيط DOS Prompt برمي گردد.

ارتقا فايل BIOS

براي ارتقا دادن فايل BIOS با استفاده از برنامه AFUDOS:

۱- از سايت وب ASUS (www.asus.com) ديدار كنيد و تازه ترين فايل BIOS را براي مادربرد داونلود كنيد. فايل BIOS را در يك فلاپي ديسك قابل بوت شدن ذخيره كنيد.

اسم فايل BIOS را روي يك تكه كاغذ بنويسيد. شما بايد در DOS prompt اسم دقيق فايل BIOS را تايپ كنيد.

۲- برنامه AFUDOS (afudos.exe) را از مادربرد كه DVD را پشتيباني مي كند به فلاپي ديسك قابل بوت شدن كه قبلا تهيه كرده ايد، كپي كنيد.

۳- سيستم را در مد DOS بوت كنيد و سپس به نوع prompt برويد:

Afudos /i [اسم فايل]

بطوريكه كه [اسم فايل] آخرين نوع يا فايل BIOS در فلاپي ديسك قابل بوت شدن باشد.

```
A:\>afudos /iP5K3D.ROM
```

۴- برنامه فايل را بررسي كرده و عمل ارتقا BIOS را شروع مي كند.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file....... done
    Reading flash...... done

    Advance Check......
    Erasing flash...... done
    Writing flash...... 0x0008CC00 (9%)
```

هنگام بهنگام كردن و ارتقا BIOS براي جلوگيري از اشكال در بوت كردن سيستم، آن را رست يا خاموش نكنيد.!

۵- برنامه بعد از كامل شدن عمليات ارتقا و بهنگام كردن BIOS به DOS prompt برمي گردد. حالا سيستم را از طريق درايو هارد ديسك بوت كنيد.

```
A:\>afudos /iP5K3D.ROM
AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB))
Copyright (C) 2002 American Megatrends, Inc. All rights reserved.

    WARNING!! Do not turn off power during flash BIOS
    Reading file....... done
    Reading flash...... done

    Advance Check......
    Erasing flash...... done
    Writing flash...... done
    Verifying flash.... done

    Please restart your computer

A:\>
```

۲-۲ برنامه فلاش AWARD BIOS

ارتقا و بهنگام كردن BIOS

ورودي/ خروجي اصلي سيستم (BIOS) مي تواند با استفاده از برنامه AwardBIOS ارتقا يابد. اين دستورالعملها را براي بهنگام كردن و ارتقا BIOS با استفاده از اين برنامه رعايت كنيد.

۱- آخرين ورشن فايل BIOS را از سايت وب ASUS داونلود كنيد. اسم فايل را به M2N32SLI.BIN عوض كنيد و آن را در يك فلاپي ديسك، CD-ROM يا يك ديسك فلاش USB در فرمت **FAT 16/12** ذخيره كنيد.

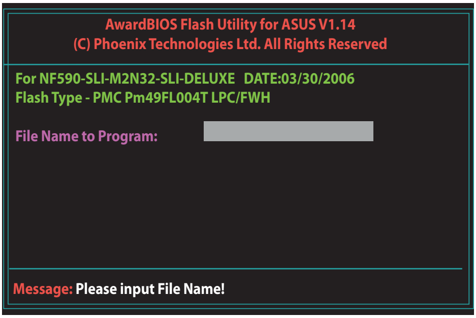
فقط فايل ارتقا يافته BIOS را در ديسك ذخيره كنيد تا از بارگذاري فايل نادرست BIOS خودداري كنيد.

۲- برنامه فلاش AwardBIOS (awdflash.exe) را از پوشه نرم افزاركه CD را پشتيباني مي كند به فلاپي ديسك CD-ROM يا يك ديسك فلاش USB با آخرين ورشن فايل BIOS كپي كنيد.

۳- سيستم را در مد DOS با استفاده از فلاپي ديسك، CD-ROM يا يك ديسك فلاش USB قابل بوت كردن كه شما قبلا آن را تهيه كرده ايد، بوت كنيد.

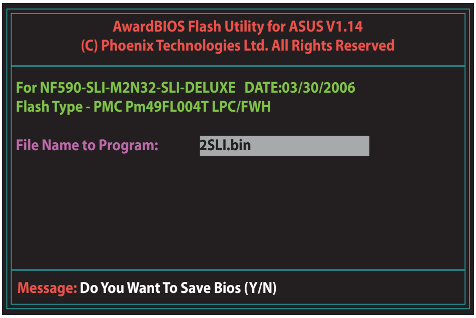
۴- تحت مد DOS از <X:> (X بجاي اسم ديسك اين كار قرار داده شده است) براي سويچ به پوشه فلاپي ديسك، CD-ROM يا ديسك فلاش USB كه شما قبلا فايل BIOS و برنامه فلاش BIOS را ذخيره كرده ايد، استفاده كنيد.

۵- در مد prompt، awdflash را تايپ كنيد و سپس دگمه <Enter> را فشار دهيد. صفحه برنامه فلاش Award BIOS ظاهر مي شود.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:

Message: Please input File Name!
```

۶- اسم فايل BIOS را در محل اسم فايل فيلد برنامه نوشته، سپس دگمه <Enter> را فشار دهيد.



AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

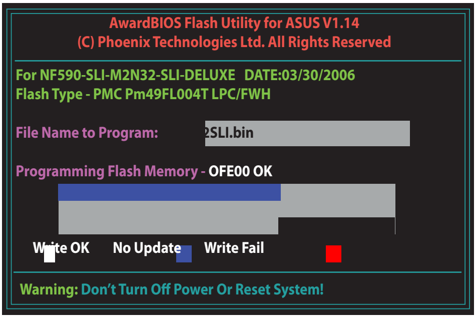
For NF590-SLI-M2N32-SLI-DELUXE DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 2SLI.bin

Message: Do You Want To Save Bios (Y/N)

۷- هنگامي که برنامه از شما مي خواهد که فايل فعلي BIOS را ذخيره کنيد، دگمه <N> را فشار دهيد. صفحه فوق ظاهر مي شود.

۸- اين برنامه فايل BIOS در فلاپي ديسك، CD-ROM يك ديسك فلاش را بررسي مي کند و فلاش کردن فايل BIOS را انجام مي دهد.



AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: 2SLI.bin

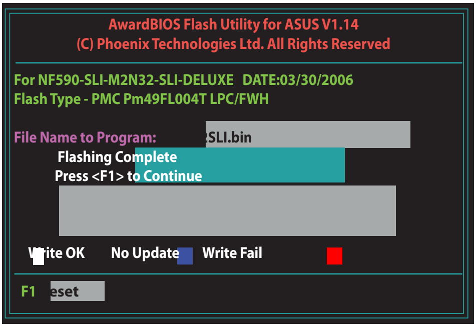
Programming Flash Memory - OFE00 OK

Write OK ⬜ No Update 🟦 Write Fail 🟥

Warning: Don't Turn Off Power Or Reset System!

در طي عمليات فلاش سيستم را رست يا خاموش نکنيد!

۹- برنامه يك پيغام فلاش کردن کامل شد را که نشان مي دهد شما بطور موفقيت آميزي فايل BIOS را فلاش کرده ايد, نشان مي دهد. ديسك را درآوريد و سپس دگمه <F1> را براي استارت دوباره سيستم فشار دهيد.



AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program: SLI.bin

Flashing Complete
Press <F1> to Continue

W⬜ite OK No Update 🟦 Write Fail 🟥

F1 eset

ذخيره كردن فايل فعلي BIOS

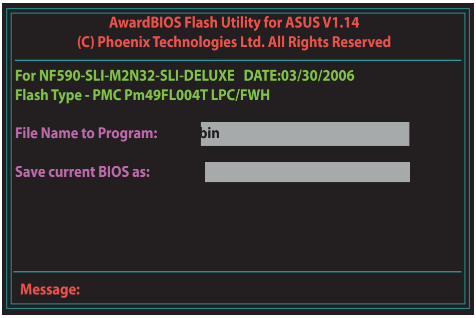
شما مي توانيد از برنامه فلاش AwardBIOS براي ذخيره فايل فعلي BIOS استفاده كنيد. شما همچنين مي توانيد فايل فعلي BIOS را در صورتي كه فايل BIOS در طي عمليات فلاش خراب شود، بارگذاري كنيد.

مطمئن شويد كه فلاپي ديسك، CD-ROM يا يك ديسك فلاش USB فضاي كافي براي ذخيره كردن فايل دارد.

براي ذخيره كردن فايل فعلي BIOS با استفاده از برنامه فلاش AwdBIOS:

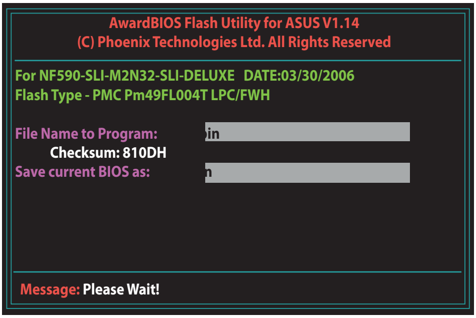
۱- مراحل ۱ تا ۶ بخش قبلي را دنبال كنيد.

۲- هنگامي كه برنامه از شما مي خواهد كه فايل فعلي BIOS را ذخيره كنيد، دگمه <Y> را فشار دهيد. صفحه فوق ظاهر مي شود.



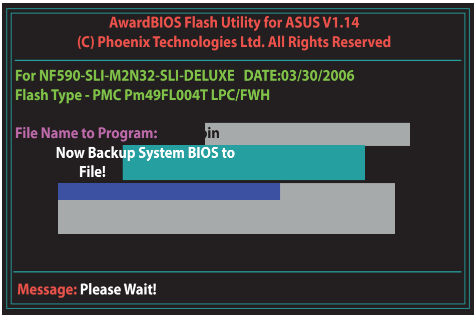
```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:            bin

Save current BIOS as:

Message:
```

۳- اسم فايل رابراي فايل BIOS فعلي در فيلد ذخيره BIOS فعلي تايپ كنيد، سپس دگمه <Enter> را فشار دهيد.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:            in
        Checksum: 810DH
Save current BIOS as:            n

Message: Please Wait!
```

۴- برنامه فايل فعلي BIOS را در ديسك ذخيره مي كند و به عمليات فلاش كردن BIOS برمي گردد.



```
AwardBIOS Flash Utility for ASUS V1.14
(C) Phoenix Technologies Ltd. All Rights Reserved

For NF590-SLI-M2N32-SLI-DELUXE   DATE:03/30/2006
Flash Type - PMC Pm49FL004T LPC/FWH

File Name to Program:            in
         Now Backup System BIOS to
            File!

Message: Please Wait!
```

۳-۲ برنامه ارتقا ASUS

ASUS يك برنامه اي است كه به شما امكان مي دهد كه BIOS مادربرد را در Windows® environment مديريت، ذخيره و ارتقا دهيد. برنامه ارتقا ASUS به شما امكان مي دهد كه:

- فايل فعلي BIOS را ذخيره كنيد.
- آخرين ورشن فايل BIOS را از اينترنت داونلود كنيد
- BIOS را از فايل بهنگام شده BIOS ارتقا دهيد
- BIOS را مستقيما از اينترنت ارتقا داده و بهنگام كنيد، و
- اطلاعات ورشن BIOS را مشاهده كنيد.

اين برنامه با پشتيباني DVD همراه بسته مادربرد عرضه شده مي شود.

بهنگام و ارتقا ASUS به ارتباط اينترنتي خواه از طريق شبكه يا فراهم كننده سرويس اينترنت (ISP) نياز دارد.

نصب ارتقاي ASUS

براي نصب ارتقاي ASUS:

۱- DVD پشتيباني را در درايو نوري بگذاريد. منوي درايورها ظاهر مي شود.

۲. از منوي **Main (اصلي)**، روي برگه **Utilities (موارد مفيد)** كليك كنيد، سپس روي **Install ASUS Update VX.XX.XX (نصب به روز رساني ASUS VX.XX.XX)**، كليك نماييد.

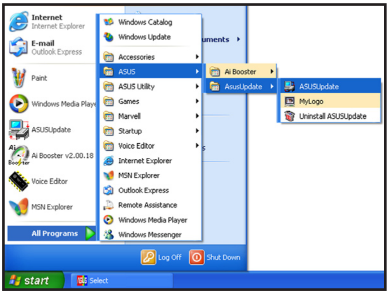
۳- برنامه بهنگام و ارتقاي ASUS به سيستم شما كپي خواهد شد

ارتقا و بهنگام كردن BIOS از طريق اينترنت

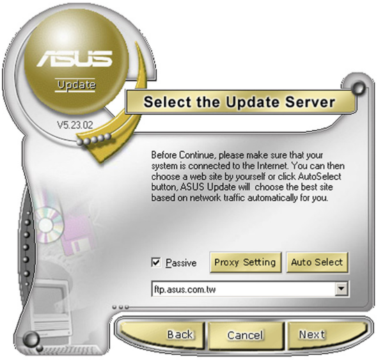
قبل از بهنگام و ارتقاي BIOS با استفاده از اين برنامه، از همه برنامه هاي ويندوز خارج شويد

براي ارتقا و بهنگام كردن BIOS از طريق اينترنت:

۱- برنامه بهنگام كردن و ارتقاي ASUS را از Windows® desktop با كليك كردن **Start>Program>ASUS>ASUSUpdate>ASUSUpdate** اجرا كنيد پنجره اصلي بهنگام كردن و ارتقاي ASUS ظاهر مي شود.


Internet
Internet Explorer
E-mail
Outlook Express
Paint
Windows Media Player
ASUSUpdate
Ai Booster v2.00.18
Voice Editor
MSN Explorer
All Programs
Windows Catalog
Windows Update
Accessories
ASUS
ASUS Utility
Games
Marvell
Startup
Voice Editor
Internet Explorer
MSN Explorer
Outlook Express
Remote Assistance
Windows Media Player
Windows Messenger
Ai Booster
AsusUpdate
ASUSUpdate
MyLogo
Uninstall ASUSUpdate
Log Off
Shut Down
start
Select

.۲ **Update BIOS from the Internet** را از منوی بازشو انتخاب کنید، سپس روی **Next** کلیک کنید.

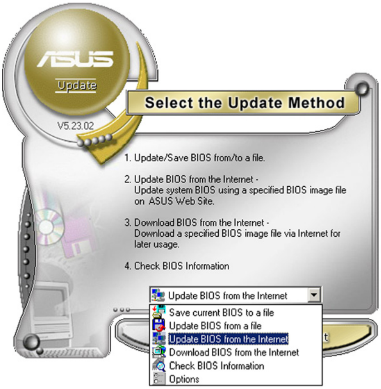

ASUS
Update
V5.23.02
Select the Update Server

Before Continue, please make sure that your system is connected to the Internet. You can then choose a web site by yourself or click AutoSelect button, ASUS Update will choose the best site based on network traffic automatically for you.

☑ Passive

Proxy Setting
Auto Select
ftp.asus.com.tw
Back
Cancel
Next

۲- بهنگام كردن و **ارتقاي BIOS** را از گزينه اينترنتي۷ و از منوي پايين كشيدني انتخاب كنيد و سپس برروي **Next** كليك كنيد.


ASUS
Update
V5.23.02
Select the Update Method

1. Update/Save BIOS from/to a file.

2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.

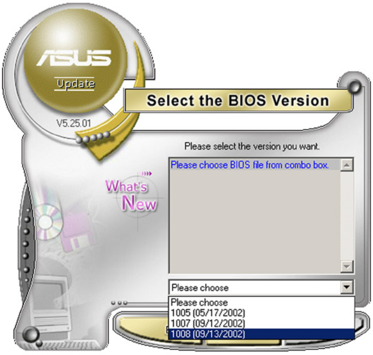
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.

4. Check BIOS Information

Update BIOS from the Internet
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

۴- از سايت FTP، ورشن BIOS را كه مي خواهيد داونلود كنيد را انتخاب كنيد. سپس **Next** را كليك كنيد.

۵- دستورالعملهاي روي صفحه را براي تكميل عمليات ارتقا دنبال كنيد.


ASUS
Update
V5.25.01
What's New
Select the BIOS Version

Please select the version you want.

Please choose BIOS file from combo box.

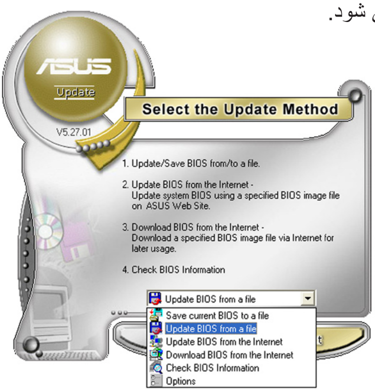
Please choose
Please choose
1005 (05/17/2002)
1007 (09/12/2002)
1008 (09/13/2002)

برنامه ارتقايASUS قابليت ارتقاي خود از طريق اينترنت را دارد. هميشه برنامه را ارتقا دهيد تا از همه اجزاي آن استفاده كنيد.

ارتقاي BIOS با فايل BIOS

براي ارتقاي BIOS با فايل BIOS:

۱- برنامه بهنگام كردن و ارتقاي ASUS را از Windows® desktop با كليك كردن **Start>Program>ASUS>ASUSUpdate>ASUSUpdate** اجرا كنيد پنجره اصلي بهنگام كردن و ارتقاي ASUS ظاهر مي شود.



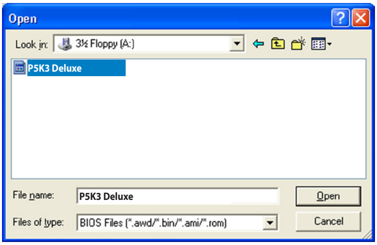
ASUS
Update
V5.27.01
Select the Update Method
Update BIOS from a file
Save current BIOS to a file
Update BIOS from a file
Update BIOS from the Internet
Download BIOS from the Internet
Check BIOS Information
Options

1. Update/Save BIOS from/to a file.
2. Update BIOS from the Internet - Update system BIOS using a specified BIOS image file on ASUS Web Site.
3. Download BIOS from the Internet - Download a specified BIOS image file via Internet for later usage.
4. Check BIOS Information

۲. **Update BIOS from a file** را از منوى بازشو انتخاب كنيد، سپس روى **Next** كليك كنيد.

۳- فايل BIOS از پنجره بازشده قرارداده و سپس **Open** را كليك كنيد.

۴- دستورالعملهاي روي صفحه براي تكميل عمليات ارتقا دنبال كنيد.



Open
Look in:
3½ Floppy (A:)
P5K3 Deluxe
Open
Cancel

File name: P5K3 Deluxe

Files of type: BIOS Files (*.awd/*.bin/*.ami/*.rom)

حتماً تنظيمات پيش فرض باياس (BIOS) را بارگذاری كنيد تا سازگاری و ثبات سيستم تضمين شود. گزينه **Load Setup Defaults** را در زير منوى **Exit** انتخاب كنيد.

۲-۴ ASUS BIOS Updater (بهنگام ساز بایوس)

ASUS BIOS Updater (بهنگام ساز بایوس) به شما امکان میدهد تا بایوس را در محیط DOS بهنگام نمایید. این برنامه کمکی همچنین به شما امکان میدهد تا فایل بایوس فعلی را کپی کنید و از آن بعنوان کپی پشتیبان هنگام بروز نقص یا خراب شدن بایوس درحین فرآیند بهنگام سازی استفاده کنید.

تصاویر صفحه نمایش مربوط به برنامه کمکی که در پی می آیند، فقط بعنوان مرجع استفاده میشوند. صفحه واقعی برنامه کمکی ممکن است مانند آنچه که نشان داده شده است نباشد.

قبل از بهنگام سازی بایوس

۱. DVD پشتیبانی مادربورد و یک درایو فلش USB با فرمت FAT32/16 و پارتیشن تکی آماده کنید.

۲. جدیدترین فایل بایوس و برنامه BIOS Updater (بهنگام ساز بایوس) را از وب سایت ASUS به نشانی http://support.asus.com دانلود کرده و آنها را در درایو فلش USB ذخیره نمایید.

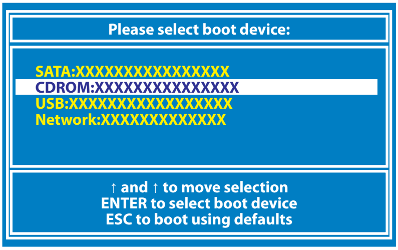
- NTFS در محیط DOS پشتیبانی نمی شود. از ذخیره کردن فایل بایوس و برنامه BIOS Updater (بهنگام ساز بایوس) در درایو دیسک سخت یا درایو فلش USB دارای فرمت NTFS خودداری کنید.
- به دلیل پایین بودن ظرفیت دیسک، فایل بایوس را روی فلاپی دیسک ذخیره نکنید.

۳. کامپیوتر را خاموش کرده و تمام درایوهای دیسک سخت SATA (اختیاری) را قطع کنید.

بوت کردن (راه اندازی) سیستم در محیط DOS

۱. درایو فلش USB حاوی آخرین فایل بایوس و برنامه BIOS Updater (بهنگام ساز بایوس) را به درگاه USB وارد نمایید.

۲. کامپیوتر را راه اندازی کنید. هنگامی که لوگوی ASUS نمایان شد، دکمه <F8> را فشار دهید تا BIOS **Boot Device Select Menu (منوی انتخاب وسیله راه اندازی بایوس)** نشان داده شود. DVD پشتیبانی را داخل درایو نوری قرار داده و درایو نوری را بعنوان وسیله راه اندازی انتخاب کنید.



```
Please select boot device:

SATA:XXXXXXXXXXXXXXXX
CDROM:XXXXXXXXXXXXXXX
USB:XXXXXXXXXXXXXXXXX
Network:XXXXXXXXXXXXX

↑ and ↑ to move selection
ENTER to select boot device
ESC to boot using defaults
```

۳. هنگامی که منوی **Make Disk (ایجاد دیسک)** نمایان شد، گزینه **FreeDOS command prompt (خط فرمان FreeDOS)** را با فشاردادن شماره گزینه انتخاب کنید.

۴. در خط فرمان FreeDOS تایپ کنید: d: و دکمه <Enter> را برای تغییر دیسک از درایو C (درایو نوری) به درایو D (درایو فلش USB) فشار دهید.

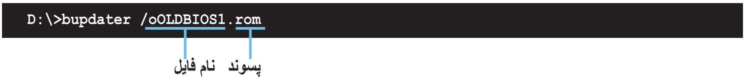
```
Welcome to FreeDOS (http://www.freedos.org)!
C:\>d:
D:\>
```

تهیه کپی پشتیبان از بایوس فعلی

برای تهیه کپی پشتیبان از فایل بایوس فعلی با استفاده از برنامه BIOS Updater (بهنگام ساز بایوس)

مطمئن شوید که درایو فلش USB در برابر نوشتن محافظت نشده است و دارای فضای آزاد کافی برای ذخیره کردن فایل می باشد.

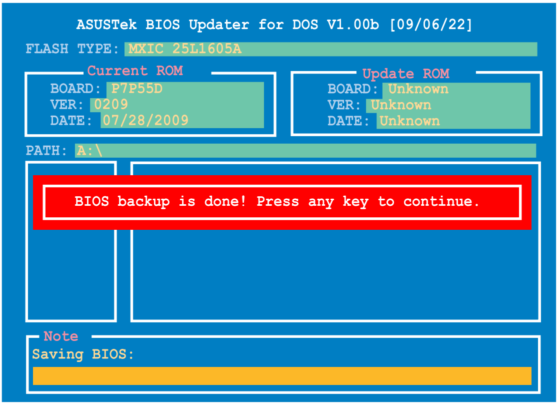
۱. در خط فرمان FreeDOS تایپ کنید bupdater /o[filename] و دکمه <Enter> را فشار دهید.



```
D:\>bupdater /oOLDBIOS1.rom
```

[نام فایل] میتواند هر نام فایل اختصاص یافته توسط کاربر با طول حداکثر هشت کاراکتر حرفی-عددی برای قسمت نام فایل و سه کاراکتر حرفی-عددی برای قسمت پسوند باشد.

۲. صفحه کپی پشتیبان برنامه BIOS Updater (بهنگام ساز بایوس) نمایان شده و روند تهیه کپی پشتیبان از بایوس را نشان میدهد. زمانی که تهیه کپی پشتیبان از بایوس به اتمام رسید، یکی از کلیدها را برای بازگشت به خط فرمان DOS فشار دهید.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
Current ROM                    Update ROM
BOARD: P7P55D                  BOARD: Unknown
VER: 0209                      VER: Unknown
DATE: 07/28/2009               DATE: Unknown
PATH: A:\
BIOS backup is done! Press any key to continue.
Note
Saving BIOS:
```

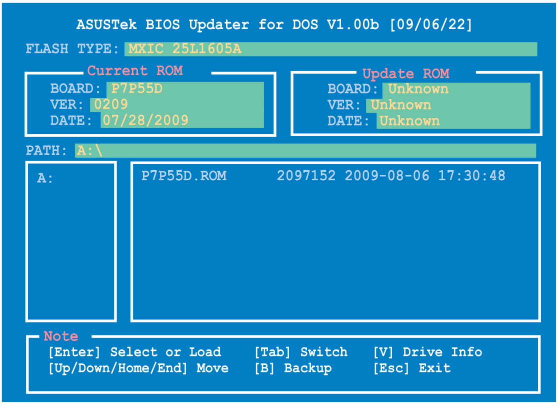
بهنگام سازی فایل بایوس

برای بهنگام سازی فایل بایوس با استفاده از برنامه BIOS Updater (بهنگام ساز بایوس)

۱. در خط فرمان FreeDOS تایپ کنید bupdater /pc /g و دکمه <Enter> را فشار دهید.

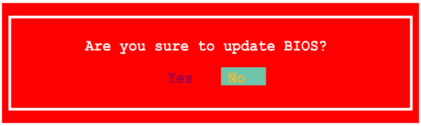
```
D:\>bupdater /pc /g
```

۲. صفحه برنامه BIOS Updater (بهنگام ساز بایوس) مطابق زیر نمایان می شود.



```
ASUSTek BIOS Updater for DOS V1.00b [09/06/22]
FLASH TYPE: MXIC 25L1605A
        Current ROM                        Update ROM
  BOARD: P7P55D                      BOARD: Unknown
  VER: 0209                          VER: Unknown
  DATE: 07/28/2009                   DATE: Unknown
PATH: A:\
A:          P7P55D.ROM      2097152 2009-08-06 17:30:48

Note
  [Enter] Select or Load      [Tab] Switch    [V] Drive Info
  [Up/Down/Home/End] Move     [B] Backup      [Esc] Exit
```

۳. برای حرکت بین قسمت های مختلف صفحه دکمه <Tab> را فشار داده و از کلیدهای <Up/Down/Home/End> برای انتخاب فایل بایوس استفاده کنید و دکمه <Enter> را فشار دهید. برنامه BIOS Updater (بهنگام ساز بایوس) فایل بایوس انتخاب شده را بررسی کرده و از شما میخواهد تا بهنگام سازی بایوس را تأیید کنید.



```
Are you sure to update BIOS?
        Yes    No
```

۴. گزینه **Yes (بله)** را انتخاب کرده و دکمه <Enter> را فشار دهید. زمانی که بهنگام سازی بایوس به پایان رسید، دکمه <ESC> را برای خروج از برنامه BIOS Updater (بهنگام ساز بایوس) فشار دهید. کامپیوتر را مجدداً راه اندازی کنید.

درحین بهنگام سازی بایوس، از خاموش کردن یا ریست کردن سیستم خودداری کنید تا از ایجاد اشکال در راه اندازی سیستم جلوگیری شود!

- در مورد BIOS Updater (بهنگام ساز بایوس) نسخه ۱،۰۴ یا جدیدتر، برنامه کاربردی پس از بهنگام سازی بایوس بطور خودکار بسته شده و به خط فرمان DOS میرود.
- حتماً تنظیمات پیش فرض بایوس را بارگذاری کنید تا از سازگاری و پایداری سیستم اطمینان حاصل شود. گزینه **Load Setup Defaults (بارگذاری پیش فرض های تنظیم)** در منوی بایوس **Exit (خروج)** را انتخاب کنید. برای جزئیات بیشتر، فصل ۳ دفترچه راهنمای مادربورد خود را ملاحظه نمایید.
- اگر درایوهای دیسک سخت SATA را قطع کرده اید، پس از بهنگام سازی فایل بایوس حتماً همه آنها را وصل کنید.

بخش ۳: عيب يابي

۳-۱ عيب يابي مادربرد DIY

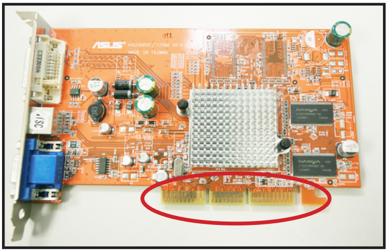
بعد از سوار كردن و جمع آوري كامپيوتر خود، شما ممكن است با مشكلاتي درشروع كارآن مواجه شويد. اين بخش پاسخ هايي به سئوالات عمومي درباره كامپيوتر خود را قبل از داخل شدن به سيستم عامل فراهم مي كند. اين بخش را براي عيب يابي اساسي بخوانيد. اين بخش در وقت و دردسرهاي تماس با تيم حمايت تكنيكي ASUA يا برگرداندن وسيله به سرويس وارانتي صرفه جويي و كمك مي كند.

۳-۱-۱ عيب يابي اساسي

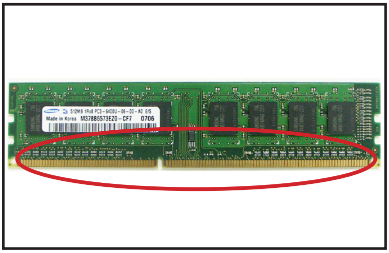
آ- اتصال بد ونامناسب

۱- مطمئن شويد كه هيچ آلودگي برروي اتصالات طلايي يا پين ها وجود ندارد.

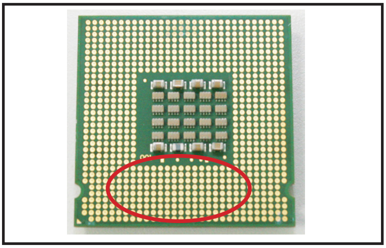
۲- با استفاده از يك پارچه پنبه اي يا يك پاك كن به ملايمت اتصالات طلايي را تميز كنيد. بخاطر داشته باشيد كه كرك هاي پاك كن را دور بريزيد.



اتصالات طلايي كارت VGA



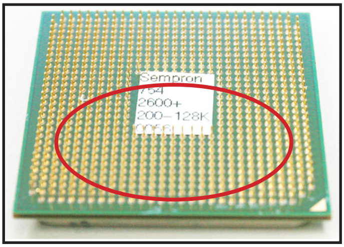
اتصالات طلايي DIMM



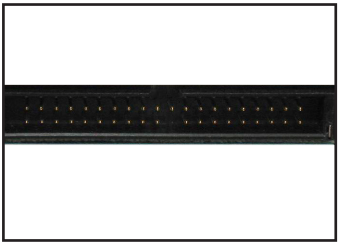
نقاط اتصالات طلايي پردازشگر LGA775

كارت يا CPU را با گرفتن از كناره هاي آن جابجا كنيد و اتصالات طلايي را لمس نكنيد چون الكتريسيته ساكن بدن شما بطور خيلي شديدي به وسيله صدمه مي زند.

۳- مطمئن شويد كه هيچ پين شكسته يا خم شده در پين هاي كانكتور يا پين هاي CPU شما وجود داشته باغشد. يك پين شكسته يا خم شده مي تواند باعث اختلال كاركرد قطعه بشود. براي حمايت بيشتر با فروشنده محلي خود تماس بگيريد.



پين هاي طلايي AMD CPU

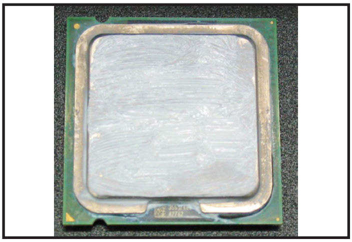


پين هاي كانكتور

اگر پين هاي شكسته يا خم شده بعد از خريد ايجاد شده باشند, فروشنده شما هزينه تعمير را از شما خواهد گرفت. بعضي وقتها پين هاي شكسته يا خم شده قابل تعمير نيستند.

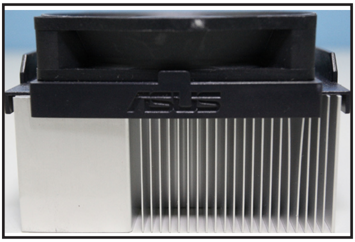
ب- CPU بيش از حد گرم شده

۱- سطح CPU را با پارچه تميزي پاك كنيد. چندين قطره از خمير گرمايي را به محل تماس CPU و هيت سينك بماليد. مطمئن شويد كه آن بصورت لايه يكنواختي پخش شده است.

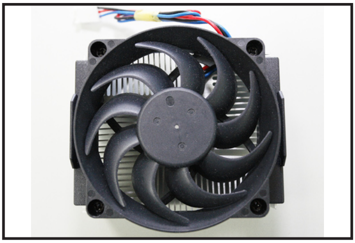


سطح CPU

۲- مطمئن شويد كه هيچ آلودگي درروي هيت سينك و فن وجود ندارد.



مشاهده كناري هيت سينك وفن



مشاهده بالايي هيت سينك و فن

۳- دستورالعملهاي سازندگان هيت سينك و فن را براي تميز كردن آلودگي ها و مواد خارجي كه سرعت چرخش فن را كاهش مي دهند، انجام دهيد.

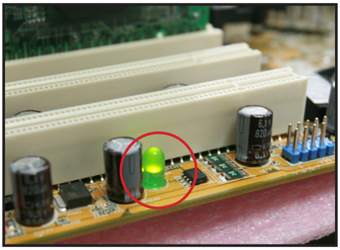
۲-۳ عيب هاي عمومي ديگر

- هنگام جدا كردن وسايل مختلف از سيستم، مطمئن شويد كه كابل هاي برق قطع شده باشند.
- همه پيغام هاي خطا در طي مرحله تست قدرت (POST) برروي صفحه نمايش داده خواهند شد.
- اگر صداي بيپ BIOS وجود دارد به بخش ۱,۱۱ براي جزئيات بيشتر مراجعه كنيد.
- براي بررسيبيشتر جدول ليست بررسي را مرور كنيد.

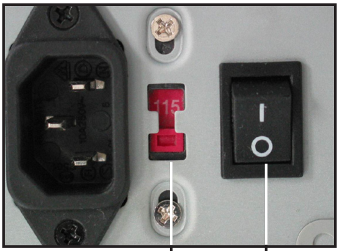
	بررسي وسايل					
	LED برق	صفحه نمايش	هيت سينك وفن	بيپ هاي BIOS	پيغام خطا	صفحه مورد اشاره
برق نيست	خاموش	خير	متوقف	خير	بدون درخواست	۴-۳
صفحه نمايش روشن نيست	روشن	خير	متوقف	خير	بدون درخواست	۵-۳
	روشن	خير	اجرا	خير	بدون درخواست	۵-۳
	روشن	خير	اجرا	بلي	بدون درخواست	۵-۳
افت در وارد شدن به سيستم عامل	روشن	بلي	اجرا	بلي	بلي	۵-۳
	روشن	بلي	اجرا	خير	بلي	۵-۳
	روشن	بلي	اجرا	خير	خير	۵-۳

اگر مشكل حل شود ولي مشكل جديدي پيش بيايد، دوباره از طريق ليست بررسي آن را مرور كنيد. اگر مشكل ادامه بيابد، با فروشنده محلي خود يا تيم حمايت تكنيكي ASUS براي كمك بيشتر تماس بگيريد.

۳-۲-۱ برق نيست

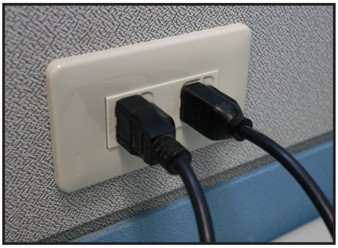


مادربرد ASUS با LED نشاندهنده روشن بودن برق عرضه مي شود. روشن بودن اين LED نشان مي دهد كه برق سيستم وصل است. اگر اين LED روشن نشود، دستورالعملهاي زير را براي برطرف كردن مشكل انجام دهيد.



۱- مطمئن شويد كه منبع تغذيه كامپيوتر خود را برروي ولتاژ ورودي صحيح در منطقه خود تنظيم كرده ايد، و منبع تغذيه به جريان برق وصل شده است.

- قبل از تنظيم ولتاژ ورودي متناوب، مطمئن شويد كه دوشاخه برق آن را قطع كرده ايد. عدم رعايت اين مورد بعث صدمات شديد و جدي به واحد منبع تغذيه مي شود.
- عدم تنظيم منبع تغذيه به ولتاژ ورودي درست متناوب بطور شديد و جدي به سيستم صدمه مي زند.



۲- مطمئن شويد كه شما كابل برق را به پريز روي ديوار وصل كرده ايد:

- دوشاخه برق را مستقيما به پريز روي ديوار وصل كنيد. آن را به ادامه كابل برق، منبع برق قطع نشدني (UPS) يا وسايل ديگر وصل نكنيد.
- دوشاخه هاي برق سيستم و مانيتور را تعويض و بررسي كنيد كه پريز ديوار بطور معمولي كار مي كند.

۳- اگر مشكل ادامه يابد، شما بايد با فروشنده خود براي خريد يك واحد منبع تغذيه جديد تماس بگيريد. اگر واحد منبع تغذيه عمل نكند، با فروشنده مادربرد ASUS براي سرويس وارانتي مادربرد تماس بگيريد.

۳-۲-۲ اختلال در بوت شدن: صفحه نمايش روشن نمي شود

بيشتر اختلالات بوت شدن و عدم نمايش صفحه تصوير از خرابي قطعات يا نصب نادرست نتيجه مي شود. دستورالعملهاي زير رابراي برطرف كردن ايرادات انجام دهيد.

۱- مطمئن شويد كه كابل هاي برق، شامل كابل هاي سيستم ومانيتور متصل هستند.

۲- مطمئن شويد كه ايراد از وسايل و قطعات حايل ايجاد مي شود.

- همه كارت ها و قطعات حايل را دربياوريد. فقط از مادربرد، مانيتور، كارت VGA، مدول هاي حافظه، واحد منبع تغذيه، هيت سينك و فن، صفحه كليد و ماوس براي شروع ربوت سيستم استفاده كنيد.
- اگر سيستم بطور معمولي كار مي كند، علت فقط يكي از كارتهاي حايل آن است كه مشكل ايجاد مي كند. وقتي كه شما دوباره آنهارا به سيستم وصل كرديد همه وسايل حايل را يكي يكي دوباره نصب كنيدووسيله خراب را پيدا كنيد.

۳- مطمئن شويد كه مشكل از يكي از قطعات اصلي سيستم ايجاد شده است.

- اگر چند قطعه ووسيله يدكي داشته باشيد، شما مي توانيد قطعات را به ترتيب، ”مدولهاي حافظه“ ”CPU“، ”مادربرد“، درايو هارد ديسك/ ديسك نوري، صفحه كليد/ ماوس، عوض كنيد تا وسيله خراب را پيدا كنيد.

وقتي كه شما وسيله خراب را يافتيد، با فروشنده وسيله خود براي سرويس تماس بگيريد.

۳-۲-۳ ايراد در وارد شدن به سيستم عامل

۱- اگر مشكل بعد از اضافه كردن سخت افزار ايجاد شده باشد. سخت افزارهاي جديد اضافه شده را دربياوريد و سيستم را ربوت كنيد. اگر سيستم بدون آن سخت افزارها بطور معمولي كار كند، ممكن است آن قطعه ووسيله خراب يا با سيستم سازگار نمي باشد. با فروشنده وسيله براي كمك وراهنمايي تماس بگيريد.

۲- اگر مشكل بعد از نصب نرم افزار يا درايور ايجاد شده باشد. دستورالعملهاي زير رابراي برطرف كردن مشكل انجام دهيد.

آ- به سيستم عامل در حالت Safe mode داخل شويد و نرم افزار يا درايور را حذف كنيد.

ب- با شركت سيستم عامل درباره حمايت بيشتر تماس بگيريد.

ت- اگر دستورالعملهاي قبلي براي حل مشكل موثر واقع نشوند، شما بايد درايو هارد ديسك خود را فرمت كني و سيستم عامل جديدي نصب كنيد.

۳- اگر مشكل بعد از تغيير تنظيمات BIOS ايجاد شده باشد، سيستم را ربوت كنيد و به BIOS داخل شويد كه آن را بطور پيش فرض بارگذاري كنيد. به راهنماي كاربر مادربرد براي جزئيات بيشتر مراجعه كنيد.

۴- اگرمشكل از ويروس هاي كامپيوتري يا فايل هاي خراب شده، ايجاد شده باشد، دستورالعملهاي زير را براي برطرف كردن ايراد انجام دهيد.

آ- به سيستم عامل در حالت Safe mode وارد شويد و تمام سيستم را با استفاده از برنامه آنتي ويروس، ويروس اسكن كنيد.

ب- با شركت سيستم عامل براي حمايت بيشتر تماس بگيريد.

ت- اگر دستورالعملهاي قبلي مشكل را حل نكند، شما بايد درايو هارد ديسك را فرمت كنيد و سيستم عامل جديدي را دوباره نصب كنيد.

۴-۲-۳ سئوالاتي كه بعضي وقتها پرسيده مي شوند

Q1: حافظه گزارش داده شده در طي مرحله POST از حافظه نصب شده متفاوت است.

A1: حافظه گزارش داده شده متفاوت نتيجه نصب مدول هاي حافظه خراب يا DIMM نادرست است. مطمئن شويد كه DIMM ها در شرايط خوبي مي باشند وdimm ها به درستي نصب شده اند. به راهنماي كاربر مادربرد براي جزئيات بيشتر مراجعه كنيد. اگر شما حافظه 4.0 GB نصب كنيد و آن 3.X GB گزارش كند طبيعي است.

Q2: سيستم نمي تواند فلاپي ديسك را كشف كند ولي فلاپي ديسك روشن است.

A2: كابل هاي فلاپي ديسك بطور نادرست نصب شده اند. مطمئن بشويد كه نوار قرمز روي كابل (انتهاي پين ۱) بايستي با پين ۱ روي درايو فلاپي ديسك تطبيق مي كند.

Q3: اختلال در وارد شدن به سيستم عامل بعد ازوصل كردن ديسك فلاش USB يا هارد ديسك خارجي.

A3: هنگامي كه سيستم ديسك فلاش USB يا هارد ديسك با USB حايل را كشف مي كند، ممكن است ترتيب بوت شدن وسيله عوض بشود. وسايل USB را جدا كنيد و سيستم را دوباره استارت كنيد.

Q4: هنگام نصب ويندوز XP، آن نمي تواند درايو هاي هارد ديسك را كه برروي كنترل كننده RAID نصب شده اند، را قرار دهد.

A4: ويندوز XP شامل درايور كنترل كننده RAID نمي باشد، بنابراين درايو هاي هارد ديسك نمي توانند كشف شوند. درايور كنترل كننده RAID را به يك فلاپي ديسك كپي كنيد ووقتي سيستم را با ديسك ويندوز XP بوت مي كنيد، دگمه <F6> را فشار دهيد تا درايور را از فلاپي ديسك بخواند. به راهنماي كاربر مادربرد براي جزئيات بيشتر مراجعه كنيد.

بخش ۴: نكات مراقبت از كامپيوتر

۴-۱ مراقبت صحيح از كامپيوتر خود

كامپيوتر شخصي شما مانند وسايل خانگي ديگر شماست. كامپيوتر خود را از رطوبت، تابش مستقيم نور خورشيد ومنابع الكتريسيته ساكن دور نگه داريد. شما بايد كامپيوتر خود را موقع روشن بودن جابجا نكنيد چون باعث صدمه به كامپيوتر مي شود. گرد وخاك داخلي باعث تاثير برروي درايوهاي ديسك هاي كامپيوتر شده و مشكل گرم شدن بيش از حد را ايجاد كرده و به قطعات كامپيوتر شما يا خود آن صدمه مي زنند.

۴-۲ اطلاعات اساسي

۱- وقتي كه از كامپيوتر خود استفاده نمي كنيد آن را با كاور ضد گرد و خاك بپوشانيد.

۲- هنگام استفاده از كامپيوتر خود، هرگز چيزي روي مانيتور CRT قرار ندهيد تا سوراخهاي تهويه هوا را مسدود كنيد. گرماي اضافي باعث اختلال كاركرد مانيتور خواهد شد.

۳- كامپيوتر خود را نزديك به ديوار نگذاريد و مقداري فضا بين كامپيوتر خود و ديوارها براي تهويه گرمايي بگذاريد. گرم شدن بيش از حد باعث خرابي و اختلال كامپيوتر مي شود.

۴- كامپيوتر را درروي سطح صاف و محكمي قرار دهيد.

۵- كامپيوتر را از مناطقي كه گرماي بيش از حد ۵ تا ۳۰ درجه سانتيگراد كه بهترين درجه حرارت براي كاركرد كامپيوتر است، دور نگهداريد. براي خارج ساختن بهتر گرما از دستگاه تهويه هوا يا پنكه الكتريكي استفاده كنيد.

۶- كابل ها را با نوار وباند بطور مرتب ببنديد تا ازايجاد مانع در جريان هوا جلوگيري كنيد.

۴-۳ اطلاعات استفاده

۱- كامپيوتر خود را بطور منظمي روشن و خاموش كنيد. اگر كامپيوتر شما لازم است كه براي مدت طولاني روشن بماند، ازفن CPU/ سيستم بهتر وواحد منبع تغذيه با ولتاژ مناسبي استفاده كنيد.

۲- قطع ناگهاني برق باعث صدمه به درايو هارد ديسك مي شود. هنگامي كه منبع برق نوسان دارد وثابت نيست، توصيه مي شود يك منبع غير قابل قطع برق به كامپيوتر خود اضافه كنيد.

۳- فايل هاي ديتا را هرچندگاهي مرتب كنيد، و بطور منظمي ويروس اسكن، بهنگام كردن كدهاي ويروس ها و دفراگمنت ديسك را انجام دهيد.

۴- كامپيوتر خود را بطور منظمي از گرد و خاك تميز كنيد. (همه كابل ها را پيش از تميز كردن از برق قطع كنيد)

- مادربرد و درايوهاي ديسك سخت/ نوري را درآورده و حذف كنيد، سپس آنهارا با جريان هواي ملايم يا برس نرم تميز كنيد.
- گرد و خاك و ضايعات مو را از واحد منبع تغذيه با يك جاروي برقي كوچك دور و خارج كنيد.

۴-۴ نكات

۱- اگر از كامپيوتر خود براي مدت طولاني استفاده نمي كنيد، مقداري مواد خشك كن جذب كننده رطوبت در شاسي آن بگذاريد كه از صدمات رطوبت جلوگيري كند.

۲- در بعضي از مناطق گرم و مرطوب، بهتر است كه شما كامپيوتر را هر هفته روشن كنيد. اين كار باعث جلوگيري از صدمات رطوبت مي شود.